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Victims' Response to Trauma and Implications for Interventions: A Selected Review and Synthesis of the Literature

Department of Justice Canada
Ministère de la Justice Canada

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Victims' Response to Trauma and Implications for Interventions: A Selected Review and Synthesis of the Literature

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The views expressed in this report are those of the author and do not necessarily represent the views of the Department of Justice Canada.

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Foreword

Gaining understanding of the victim's internal psychological world is the task of both researchers and service-deliverers who focus on victimization. Those who work in this area often show an investment in this population that goes beyond standard research study. Furthermore, understanding psychological changes is an integral part of understanding crime victims' internal world. These changes have immediate effect in handling the crime event itself, but also impact on subsequent coping. The author has focused this document on delineating cognitive change in victims. However, the overarching focus is applying how victim characteristics, cognitive changes and coping skill impacts clinical understanding and interventions. This service-focus is reflected in the broad nature of the literature covered and the willingness of the author to move outside the boundaries of cognitive changes and crime victim research when the literature is found lacking. This exploratory approach should provide a useful guide to future policy development, program development, research and clinical investigations.

The interpretations included in this document are solely those of the author and are not necessarily those of Justice Canada or its employees.

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Key Findings

The following conclusions are based upon a review of the literature:

- Crime victimization is a process not an event.
- Victims suffer from cognitive changes based upon victimization.
- The literature specifically examining cognitive changes in victimization is extremely sparse. More research and applied work is needed to understand the cognitive changes related to victimization.
- Common reactions to crime victimization include anger, fear and avoidance. Other reactions include depression, anxiety, dissociation, information seeking and empowerment.
- It is likely that victimization has a cognitive effect both directly through re-defining oneself as a "victim" and indirectly, through the changes that accompany reactions.
- Crime characteristics are important when looking at trauma reaction.
- Severity of the crime and injury appears to be more important than the specific nature of the crime (e.g., family violence vs. assault vs. sexual assault) with respect to developing symptoms.
- Perceived and actual social support is important in moderating trauma reaction.
- Social support has a major effect on decision-making and subsequent coping.
- Victims prefer natural supports (family, friends) to professional supports.
- There has been little empirical research on the applicability of matching clients to interventions or the effectiveness of crisis intervention.
- Victims require a continuum of services.

Executive Summary

The process of victimization does not end with the crime. Trauma associated with criminal behaviour can affect how victims view themselves, their world and their relationships. Trauma and loss have the potential to threaten one's sense of meaning in life. Furthermore, the psychological effects of trauma can be longstanding and potentially debilitating. This review focuses on cognitive changes that affect the entire person. Problem-solving ability, coping skills, personal, social and work relationships can all become compromised by cognitive changes. The focus of this review and synthesis is to identify cognitive changes that are related to crime victimization and relate this to clinical issues around interventions. A major challenge of the present review is that there is little empirical research in the area of cognitive changes in victimization. Thus, all effort has been made to include related areas to shed light on the very complex psychological world of the victim.

In examining the victim's internal world it is difficult to specify any one psychological profile related to victim reaction. The reality of individual psychology is that each person is different and will react differently to any stressor, including crime. However, one can discuss some likely psychological effects of being a crime victim. Casarez-Levison (1992) indicated victims might experience fear, humiliation, embarrassment, anger, loss, rejection, and physical symptoms. Others include some of the above problems and added depression, anxiety, hostility, avoidance, alienation, reduced self-esteem and increased need for social support in both victims of violent and non-violent crime (Norris, Kaniasty & Thompson, 1997). The psychological trauma associated with victimization may cause disruptions in feelings of control, interpersonal attachment, hypervigilance, sleep disturbance, intrusive memories, and feelings of anxiety, anger, grief, and depression (Everly, Flannery & Mitchell, 2000). At the interpersonal-social level, victimization and trauma can affect a wide variety of systems, including family, marital-peer relationships, the school-work community, or even the broader community (Burlingame & Layne, 2001).

In trying to understand the process of victimization, Casarez-Levison (1992) synthesized several models and delineated four stages in the victimization process: pre-victimization/organization, victimization/disorganization, transition/ protection and reorganization/resolution. This model tracks the victim from a pre-crime state, to coping with the criminal event, to adjusting to the ramifications of the criminal event. Most victims will face feelings of denial and acceptance around their experience. As victims cope with their new role of "survivor" they often question the predictability of their world, belief that the world is a safe place and that the world is fair. This challenges the "just-world" belief that good things happen to good people and bad things happen to bad people (Resick & Schnicke, 1993). Crime severity and pre-victimization characteristics often affect how much the victim faces these challenges. Of note, victims do not return to a pre-victimized state, but are forever changed by victimization. Specific crime characteristics (severity, use of violence, use of a weapon, use of threat), victim characteristics (coping skills, abuse history, personality characteristics, demographics) and system characteristics (reaction of officials, perceived and received support) can affect the victim's distress level (Gilboa-Schechtman& Foa, 2001; Norris et al., 1997; Ozer, Best, Lipsey & Weiss, 2003). This distress has an impact on subsequent adjustment.

In examining psychological consequences of crime, one must recognize that victimization is often an unpredictable event that interferes with the normal routine of the victim. Cognitive and emotional

reactions can result in an inability to go out, avoidance of crime-related stimuli, social withdrawal, altered activity, increased dependence on others, alcohol/drug abuse and drastic changes in living circumstances (moving, cutting off the phone, etc.). About half of violent crime victims report moderate to extreme distress, including depression, hostility and anxiety (Norris et al., 1997). Crime severity also affects distress (anger, tension, sadness), safety (fear, avoidance), esteem (low self-worth, inferiority) and trust (cynicism, pessimism). Cognitive outcomes can include memory problems, decision-making deficits, increased susceptibility to social influence, disorientation, concentration problems and so on. Although symptoms may be present during the criminal event, many can continue for some time after the crime, if not properly addressed.

With respect to coping, Norris et al. (1997) noted the importance of accessing natural (family, friends, etc.) and professional (police, lawyer, clergy, medical, mental health) sources of support. Although victims tend to prefer natural supports (Leymann & Lindell, 1992), about 12% of victims seek mental health services, with the victims of violent crime accessing services more often (Norris et al., 1997). Other common coping strategies include: information seeking, emphasizing survival, self-comparison, social comparison, activities in service of regaining control, activism, avoidance, denial and self-deception, dissociation and cognitively narrowing the focus. Victims have many possible coping strategies at their disposal and their choice of strategy is likely a combination of cognitive skills, history and individual personality variables. The above list is not exhaustive as each person will have their own unique set of thoughts and feelings and these will work in synergy to create coping strategies and behaviours.

In examining trauma and crime victimization, much of the clinical research has focused on post-traumatic stress disorder (PTSD), anxiety and depression (Byrne et al., 1999; Dempsey, 2002). Researchers have found that violence and negative coping explained 30% of the variance in PTSD, 11% of the variance in anxiety and 20% of the variance in depression (Dempsey, 2002). These disorders have been linked to workplace violence (Rogers & Kelloway, 2000), sexual assault (Byrne et al., 1999), childhood sexual abuse, (Merrill, Thomsen, Sinclair, Gold & Milner, 2001), critical incidents (Everly et al., 2000), violent crime (Byrne et al., 1999) and family violence (Wolkenstein & Sterman, 1998). PTSD specifically, has been identified as a relatively common result of victimization (Byrne et al., 1999).

One possible strategy to address trauma in victims is Critical Incident Stress Management (CISM). CISM is a merging of crisis intervention models and group psychological debriefing techniques (Everly et al., 2000). Through application of pre-crisis preparation, large-scale procedures, individual acute crisis counselling, defusings, debriefings, family crisis interventions and follow-up procedures one hopes to avoid the worst effects of trauma. Although there is debate regarding the effectiveness of CISM, this approach does recognize the need for immediate victim services (Everly et al., 2000). Crime victims may benefit from early crisis intervention from the perspective of helping them overcome initial challenges, rather than focusing on reducing outcomes such as post-traumatic stress, anxiety and depression that may be better left for therapy (Calhoun & Atkeson, 1991).

Another model that could be applied to understanding how victims might cope with interventions is the Transtheoretical Model of Change (TMC) (Prochaska, DiClemente & Norcross, 1992). The TMC holds that people cycle through different psychological and behavioural processes when faced with change. The five stages are: pre-contemplation (no intention to change), contemplation (awareness of

their problem and are seriously considering change), preparation (intend to do something soon), action (actively trying to make change) and maintenance (maintaining change and preventing relapse). The TMC shows good generalizability to different problem areas and change processes. The model also gives recommendations to help people move quickly through the change process. This could be particularly relevant in helping match victims to appropriate services and improve outcomes. There is little research on applying the TMC to victim interventions, but there is indication that it could be useful.

Finally, there are several improvements needed to develop a solid literature base on cognitive changes in crime victimization. The primary need is to expand this literature substantially as there has been little work in this area. In such an expansion, researchers should focus on longitudinal research which will allow examination of pre-crime status and change, use of common methods and measures, use of match comparison/control groups, using other-report and self-report on outcome measures, and comparing normal coping to coping with victimization. The literature could also benefit from an examination of vicarious traumatization on natural supports and research on the utility of CISM and TMC to crime victims. Finally, all this research should include use of real world victims that does not exclude more difficult cases.

In conclusion, it is apparent that victims undergo cognitive and emotional changes through the process of victimization. Victims requiring services need to quickly access appropriate interventions. Matching clients to services could use severity as a guide. Unfortunately, much of this is conjecture as there is little research in the area. Victims can be helped if we improve research, match clients to treatments, provide a continuum of services, support practical treatments, work to prevent future victimization, and support service-deliverers. Education, crisis intervention, support, group interventions and intensive individual therapy are all a part of this service continuum.

1.0 Introduction

The process of victimization does not end with the crime. Trauma associated with criminal behaviour can affect how the person views themselves, their world and their relationships. According to theory, trauma and loss have the potential to threaten both one's sense of meaning in life (i.e., they may threaten significant aspects of one's self-concept), as well as the assumptions one holds about the comprehensibility and meaningfulness of events. Furthermore, trauma does not end in the physical realm; the psychological effects of trauma can be longstanding and potentially debilitating. This review focuses on one possible outcome of crime victimization: cognitive changes. However, in examining victimization one is struck by the fact that one cannot easily focus on one psychological element, but that any cognitive change will affect the entire person. Problem-solving ability, coping skills, personal, social and work relationships can all become compromised by cognitive changes. The focus of this review and synthesis is to identify cognitive changes that are related to crime victimization and relate this to clinical issues around interventions. However, this requires a broad approach as one uncovers the complexities of the victim's psychological world.

One of the challenges of the present review is that there is little empirical research in the area of cognitive changes in victimization. Fortunately, some extrapolation from related research areas can be generalized to this question, but this requires some tenuous leaps. For example, research on the effects of trauma may be applicable to victims. We can then examine cognitive changes related to trauma, extrapolating these results to victims who experience trauma associated with victimization. For this reason, this review needs to be seen as a first step in understanding the complexities of cognitive changes.

Although it's unusual to begin such a report with caveats, there are several issues that must remain in the reader's mind as he or she reads this document:

> First, in any discussion of victims (the process of becoming a victim, changes in victims and treatment/labelling of victims), one can understandably lose sight of the broader system. It is important to note that victims exist within a larger, sometimes pathological, system that may continue to create difficulty and trauma. As Gorman (2001) indicated, one should be careful in limiting one's focus on the specific characteristics of the victim and, thereby, ignoring the inherent injustice of victimization itself. In the following document, it is important to remember that although the focus is on the intrapsychic and internal world of the victim, this is only one aspect of victimization. The author has taken steps to avoid victim-blaming, however literature focused on certain aspects of victimization (e.g., victimization risk factors) can be misused in this manner. The goal of this review is understanding, not attribution of blame.
>
> Second, much of the literature reviewed in this document includes both official victims (i. e., those who made official contact with the criminal justice system) and those who have self-reported victimization (some may have contacted officials, other's not). The reason for this was the need to cast a wide net to gain any understanding of how victimization affects the cognitive, emotional and behavioural world of the victim. However, this inclusiveness will affect generalizability to any specific group, thus one should be conservative in applying the

results. The document is best used to generate hypotheses and testing new research and intervention avenues.

Third, whenever possible, research results are based upon crime victims. However, in an effort to better examine cognitive changes, other groups have been included to fill the gaps. Generally, these groups have been victims of other trauma (war, accident, natural disasters) or of loss. It is likely that there will be some parallels between these various groups but, again, this reinforces the need for further research focused on crime victims.

Finally, throughout this paper, a crime victim will be defined as a person who has directly experienced and suffered because of a specific illegal or violent act. This does not negate the damage received by loved-ones or supports to the victim through the process of vicarious victimization. These supports may also suffer psychologically, socially or financially (depending on the nature crime) and may deal with many of the same issues. However, the focus of this paper will be on the primary victims of crime, with some discussion of secondary victims as required.

This having been said, the following review and synthesis aims to integrate a wide research and applied literature to gain insight about the victim's world. Cognitive changes will have a profound impact on the victim, affecting their coping, problem-solving, behavioural and social world. One can hypothesize that certain victims may have little psychological change as a result of victimization (e.g., minor crimes with no contact with perpetrator) whereas others will experience victimization as a permanent life-changing event. The goal of this review is to examine this literature and some of the implications of the findings.

2.0 Literature Review

2.1 Trauma Process

One can examine victimization from several different perspectives including social, legal, economic, political, and others. This particular treatment of victimization will focus on trauma from a psychological perspective. The main reason for this is that it is at this individual level that victimization can have its most profound impact. An individual's reactions to crime affect all that person's life and influences the lives around him or her. Changes that manifest as a result of victimization can upset family, vocational, educational and cultural systems. By reviewing the common cognitive, emotional and behavioural reactions to being victimized one can begin to uncover the dynamics of victimization at the personal level. This focus then has implications for treatment and education initiatives.

This review begins with exploring how people react to the process of victimization, focusing on the cognitive element. I then turn to the issue of cognitive changes - shifts in thinking patterns that researchers have linked to victimization. The next section discusses a related topic, the coping strategies commonly used by victims and issues related to possible problem areas for victims. Finally, the issue of treatment is explored in light of the focus of the paper. First, the paper begins with a review of victimization and its psychological effects.

It is difficult to specify any one psychological profile related to victim reaction. The reality of individual psychology is that each person is different and will react differently to any stressor, including crime. However, one can discuss some likely psychological effects of being a crime victim. Casarez-Levison (1992) indicated victims might experience fear, humiliation, embarrassment, anger, loss, rejection, and physical symptoms (nausea, stomach problem, muscles tension, etc.). Others have included some of the above problems and added depression, anxiety, hostility, avoidance, alienation, reduced self-esteem and increased need for social support in both victims of violent and non-violent crime (Norris, Kaniasty & Thompson, 1997). The psychological trauma associated with victimization may cause disruptions in self-efficacy (i.e., feeling of mastery over one's environment), interpersonal attachment, hypervigilance, sleep disturbance, intrusive memories, and feelings of anxiety, anger, grief, and depression (Everly, Flannery & Mitchell, 2000). At the interpersonal-social level, victimization and trauma can affect a wide variety of systems, including family, marital-peer relationships, the school-work community, or even the broader community (Burlingame & Layne,2001).

In trying to understand the process of victimization and the subsequent coping attempts, Casarez-Levison (1992) reviewed and synthesized several different theoretical models that researchers and theoreticians have used to understand how people deal with trauma. Her model follows the person from the precrime state, to the crime and immediate after-effects, early coping/reorganization and, finally, resolution. More specifically, her model includes the following stages:

> Stage 1: Previctimzation/Organization. This stage focuses on the previctimization adaptation level of the person. This includes the individual's strengths and characteristics, social/economical resources and cultural supports. In other words, how the person lived and

coped with daily stress before being victimized (Casarez-Levison, 1992). Importantly, many have noted that current victims of crime often have a history of previous victimization (Byrne, Resnick, Kilpatrick, Best & Saunders, 1999; Messman & Long, 1996; Norris et al., 1997; Nishith, Mechanic & Resick, 2000). Thus, there is a strong likelihood that how the person has resolved previous victimizations will have an effect on how they handle current victimization. Several sections later in this report will provide more detail on the moderating effects of specific previctimization characteristics on subsequent coping.

Stage 2: Victimization/Disorganization. This stage focuses on the criminal event itself, and the first few hours and days following the crime. The person is now a victim and likely experiences feelings of threat, disruption/disorganization, injury (physical, emotional or mental), some form of loss (physical, material or psychological), and traumatic stress. Casarez-Levinson's (1992) postulated that victims often experience reactions such as helplessness, anger, numbness, shock, fear and grief. Furthermore, as discussed above, the model suggests that each individual will have unique experiences depending upon their individual differences and previctimization characteristics. Obviously, these characteristics also influence the severity of the reaction. People also have differential abilities in employing coping skills, problem-solving and managing emotions (Casarez-Levison, 1992). In very simple terms: "Whenever people are involved in this kind of trouble [victimization], trouble arises" (Hagemann, 1992, p. 60).

Stage 3: Transition/ Protection. This stage focuses on how the person begins to adjust to the victimization and its associated ramifications. The process can start within a few weeks of the crime to 6 to 8 months later. This stage includes many of the same characteristics of Victimization/ Disorganization Stage but recognizes the victim is beginning the process of reintegration and making sense of his or her victimization (meaning-making). Meaning-making has often been seen as a part of grief work (Davis, Nolen-Hoeksema & Larson, 1998) and crime victim treatment (Layne et al., 2001). Researchers have also noted the importance of meaning-making in general crime victims (Gorman, 2001), rape victims (Thompson, 2000), and in dealing with any type of trauma (Nolen-Hoeksema & Davis, 1999). In fact, meaning-making is often included as a major element in treatment interventions (Foy, Eriksson & Trice, 2001).

During the Transition/ Protection stage, the victim may be in greatest need of assistance, either from their social network or professionals. Support will likely help the victim better deal with stress and improve his or her attempts to cope with the experience. This stage can also include maladaptive coping responses such as drug and alcohol abuse, deterioration in relationships, increased isolation or withdrawal (Casarez-Levison, 1992). Some victims may show outward signs of adjusting, while experiencing profound difficulties under this calm exterior. Thus, the goal of interventions during this stage is to increase positive coping behaviours. Learning adaptive coping techniques should help the person reintegrate and move beyond the victimization experience. If stressors continue, then the person is unlikely to fully move into the final stage and may reach a state of total exhaustion (Casarez-Levison, 1992).

Stage 4: Reorganization/Resolution. This stage focuses on a reintegration of the person into a stable functioning individual. In the best case, this may occur in 6 to 12 months; in the worst

case, the process can take many years. Reorganization/ Resolution includes a return to normal daily activity and normal relationships. Most people will face feelings of denial and acceptance around their experience. Generally, victims need to address questions of seeing the world as a safe place and their new "survivor" role, depending on the severity of the crime and previctimization characteristics. Also note, that this reorganization does not mean a return to the previctimization state, as crime victims need to incorporate this experience into their understanding of themselves and their world. Maladaptive responses, which delay total reorganization, may include substance abuse and mental health problems (Casarez-Levison, 1992) and should be addressed in this phase as well as in the Transition/ Protection stage. On a positive note, interventions appear to be able to help victims many years post-victimization (Resick, Nishith, Weaver, Astin & Feuer, 2002). This not only reflects the long-lasting effects of crime on the victim, but also the ability of victims to improve their functioning long after the crime.

The above model has some applicability in improving our understanding of the process of victimization. Crime victimization is an invasive process that upsets the normal daily life of the victim, permeating all aspect of his or her life. Furthermore, the model acknowledges that being a victim of crime is an external and unpredictable stressor that is far-reaching. Although the model provides a timeline for victim reactions, one must be cautious in applying these estimates to all victims or to all types of crime. Specific crime characteristics (severity, use of violence, use of a weapon, use of threat), victim characteristics (coping skills, abuse history, personality characteristics) and system characteristics (reaction of officials, help received) can affect the victim's distress level (Gilboa-Schechtman & Foa, 2001; Norris et al., 1997; Ozer, Best, Lipsey & Weiss, 2003). Obviously, this distress also has an impact on subsequent adjustment. The victim's experiences, personality, history and social/economic resources then guide how he or she copes with the crime. Before moving to cognitive changes and coping strategies, we will examine the psychological consequences of victimization, as well as other important issues that may affect the victim's recovery from crime related trauma.

Psychological Consequences

In the previous section, I reviewed a model of how victims might be affected by victimization and possible underlying challenges that face the victim, as well as some commonly associated reactions. Although the symptoms and Casarez-Levison's (1992) model are related to research, as well as theory, it is useful to examine other research that has attempted to understand the crime victim's psychological reality.

In a discussion on the effect of sexual assault, Mezy (1988) delineated several common psychological elements of the rape trauma syndrome, many of which can be generalized to other types of victimization. These included depression, tearfulness, anxiety, flashbacks, guilt, shame, decreased sexual enjoyment, poor concentration, irritability, apathy and phobias. She indicated that these underlying symptoms can manifest in an inability to go out, avoidance of crime-related stimuli, social withdrawal, altered sexual activity, increased dependence on others, alcohol/drug abuse and drastic changes in living circumstances (moving, cutting off the phone, etc.). Obviously some of these symptoms and behaviours are more related to sexual assault or other violent crime, but some may be related to non-violent crime, depending on the strengths and skills of the victim.

In an excellent study of both violent and non-violent crime victims, Norris et al. (1997) examined the psychological consequences of crime via a longitudinal telephone survey study in Kentucky. In their research, they distinguished between activators (the crime), reactions (fear, avoidance), consequences (psychological symptoms: depression, somatization (bodily symptoms), hostility, anxiety and phobic anxiety), and moderators (characteristics that change the relationship between activators and reactions and consequences). The strength of their research is that it is based upon a randomly selected population survey and not a convenient clinical population. The research is also longitudinal, which allows for follow-up to assess symptom change and allows observation with new factors such and life stress and new crimes (Norris et al., 1997). These strengths can give the reader confidence in their results.

The activators included both property crime (burglary, larceny, vandalism and any property crime) and violent crimes (sexual assault, robbery, aggravated assault, simple assault and any violent crime). Participants were selected based upon being crime victims at the time of the initial interview. However, the researchers found that those identified as victims at the initial interview were also more likely than non-victims to be re-victimized in the intervening time between the first interview and the subsequent two interviews (at 6 and 12 months). With respect to consequences, the authors found that the no-victimization control was similar to general population norms and that victimization resulted in an increase in psychological symptoms, although not always to extreme levels of distress (Norris et al., 1997).

Regarding the consequences of crime, about 25% of violent crime victims reported extreme levels of distress, including depression, hostility and anxiety (Norris et al., 1997). Another 22% to 27% reported moderate to severe problems. This means that approximately 50% of violent crime victims report moderate to extreme distress. However, there was no specific profile of distress for the victim group. Rather, there was a general elevation on all consequences subscales, with no victimization as lowest profile, property crime victims were higher and violent crime victims were in the highest level. This supports the view that severity plays a major role in subsequent levels of symptomatolgy.

Norris et al. (1997) also noted that crime challenges victims' view of themselves or their worlds. Basically, victimization alters the script they follow in normal daily life. These authors examined distress (anger, tension, sadness), safety (fear, avoidance), esteem (low self-worth, inferiority) and trust (cynicism, pessimism). Their results indicated that severity of violent victimization affects distress both directly and indirectly, through safety, esteem and trust. In severity of non-violent crime, victimization has no direct relationship to distress but is mediated by safety, esteem and trust. Thus, in non-violent crime the actual victimization is only important in that affects the victim's internal processes (especially safety), whereas, in violent crime, it affects these internal processes and has its own direct affect (Norris et al., 1997). This reinforces the traumatic nature of violent crime over non-violent crime and that any victimization has a negative effect.

Reactions to criminal victimization showed a similar profile, with violent crime victims showing the greatest amount of avoidance and fear (Norris et al., 1997). With respect to recovery, both victim groups showed a reduction in symptoms as time passed. The violent crime victim group showed the greatest reduction, however, the relative ranking of each group stayed the same. That is, neither victim group achieved the levels of the no-crime group and the violent crime group still showed more distress than the violent crime group. However, Norris et al. (1997) pointed out that the victim groups differed

on several variables from the no-crime group (demographics, previous symptoms, occurrence of subsequent crimes). Thus, they analyzed the data controlling for the effects of these possible confounds. They found that demographic variables and previous symptoms did not seem to have an effect but that further victimization prolonged self-reported distress symptoms. From a clinical perspective, this result is unsurprising as it is reasonable to assume that the either chronic victimization or repeat victimization would cause a deepening of distress and associated psychological symptoms.

With respect to moderators, Norris et al. (1997) noted the importance of accessing natural (family, friends, etc.) and professional (police, lawyer, clergy, medical, mental health) sources of support. They indicated that about 12.5% of victims seek mental health services, with the victims of violent crime accessing services more often. In contrast, victims of property-crime and no victimization accessed services at comparable rates. Of note, depression and use of violence during the crime predicted who accessed mental health services. Also, the more likely a victim was to use natural supports the more likely they were to access professional supports (Norris et al., 1997). Furthermore, receiving support also buffered fear reaction. Later sections will discuss the role of support in cognitive reaction and coping, but it is clear that support is a major element to moderating the negative effects of victimization. Before moving to these sections, the longitudinal nature of Norris et al. (1997) research allows one to examine important issues such as: time to heal, secondary victimization by the system and interference by subsequent victimization.

Time to heal

Criminal victimization seems to have long-lasting effects. Norris et al. (1997) found that both violent and non-violent crime victims show a reduction in symptoms over the first few months post-crime, but then the reduction levelled off. At the end of their longitudinal study (15 months) the relative ranking of distress maintained, with violent crime victims the most distressed, non-violent crime victims second and no-crime participants reporting the lowest levels of distress. On the other hand, with a much smaller sample, Hagemann (1992) reported that most victims in his research were functioning quite well one year after the crime (fewer symptoms, crime no longer a central part of their life, etc.). However, he indicated that they did not necessarily return to a pre-victimization identity. A possible explanation for this discrepancy is that victims of sexual assault may put their symptoms on hold (Resick et al. 2002). Thus, although the passage of time may give the person the opportunity to return to a “functional” life, victimization appears to have long-lasting effects (Gilboa-Schechtman & Foa, 2001; Norris et al., 1997).

Secondary Victimization by the System

Much is made of the secondary victimization associated with contact with the justice system. Norris et al. (1997) examined those individuals who contacted the authorities in response to their victimization. They focused on severity of the crime, was the perpetrator known to the victim, did the police look for evidence, did police promise to investigate, was there an arrest, did the victim describe the police as helpful, and victim alienation (pessimism, cynicism and hopelessness). They found that crime severity and knowing the perpetrator increased alienation, whereas viewing the police as helpful reduced alienation (Norris et al., 1997). Thus, appropriate reaction of criminal justice personnel can have a positive effect on the victim. Victims view both investigation and arrest as positive and it increased the perception that police were helpful, thereby reducing alienation.

It is interesting to note that actual arrests were less important than the promise that an investigation would occur. Victim beliefs seem to be a major moderating factor, rather than tangible results (Norris et al., 1997). Victims appear to require that something be done rather than an overall "thirst for justice". One hypothesis is that victims are less concerned with abstract concepts of justice but, rather, need assurances that people in their immediate world are acting to help and protect them. Another hypothesis is that victims' benefit by being attended to, and having their experience of victimization validated and taken seriously. These hypotheses require empirical validation but make logical sense, especially when one considers how victims react in the immediate aftermath of victimization.

Campbell, Sefl, Barnes, Ahrens, Wasco and Zaragoza-Diesfeld (1999) examined secondary victimization at the system level among sexual assault survivors. In their sample, 66% of survivors were assaulted by someone they knew, 94% were sexually assaulted by a single assailant, 38% were not physically injured in the attack, 30% of the sexual assaults included the use of a weapon and 70% of victims had no alcohol prior to the sexual assault. They found that although individual characteristics and crime-related characteristic did not predict post-traumatic stress, negative experiences with the criminal justice /medical systems did increase post-traumatic stress symptoms.

Similarly, Warshaw (1993) examined the emergency room charts of 52 women who had clear sign of abuse. She found that medical staff performed the required elements of their job such as reporting possible abuse or prescribing pain medication. However, very few asked any questions regarding future risk or abuse. In fact, in 78% of cases of possible abuse, the doctor did not report the relationship between the victim and assailant (Warshaw, 1993). As one synthesizes these findings one is struck by the effect professional supports can have on victims. In a process-oriented study, Hagemann (1992) reported that lack of concern and treating the victims as a statistic resulted in negative views on the part of the victim. Thus, personnel in the criminal justice and medical systems should be aware of the potential impact of their actions and take measure to minimize secondary victimization.

Although the relationship between professional reaction and distress is concerning, it is also important to examine moderators. Non-stranger sexual assault victims who experienced a high degree of secondary victimization and received minimal help from the criminal justice or medical system experienced higher distress scores (Campbell et al., 1999). However, if the survivor received mental health services after difficult contact with the medical system, there was a reduction in the reported negative effects. These results suggest that medical and criminal justice procedures can have a negative impact on the victim, but that these effects can be ameliorated by referral to other supports. However, as Moriarty and Earle (1999) indicated, after being examined and questioned by police and medical personnel, the survivor may be understandably reluctant to recount their story to yet another stranger. Thus, not only should medical/criminal justice personnel be aware of these issues, they should work to minimize the effects and respectfully support victims in accessing other services.

Interference by subsequent victimization

Several studies report that previous victimization is a very strong, if not the strongest, predictor of subsequent victimization (Byrne et al., 1999; Messman & Long, 1996; Norris et al., 1997; Nishith et al., 2000). Furthermore, previous victimization seems to affect the victim's reaction to new victimization. In their review of revictimization in survivors of childhood sexual abuse (CSA), Messman and Long (1996) indicated that CSA survivors are at increased risk for victimization in later

years. They further indicated that researchers identified several factors that may mediate this link, including, self-esteem, learned helplessness, relationship choices, learned behaviour patterns/expectations and differences in causal attributions. These elements point to long-lasting cognitive changes that affect thinking and behavioural patterns that may place the person at increased risk for further victimization. However, Messman and Long (1996) pointed out that these links remain theoretical, as there is minimal empirical validation. They also emphasize that these links should not be seen as victim-blaming, but rather as potential leads to effective program development for victims.

Similarly, Byrne et al. (1999) reported that assault survivors might be caught in a downward cycle with respect to poverty and victimization. Re-victimization doubled the likelihood that women with an assault history would move below the poverty level over time. Further, poverty is a risk factor for subsequent victimization. Similarly, those women who experienced a new assault were more than twice as likely to be unemployed at follow-up than women who did not experience a new assault. These results indicate that re-victimization interferes with the victim's reintegration process or, under Casarez-Levison's (1992) model, re-organize.

It also does not seem to matter the length of time between victimizations, Nishith et al. (2000) also noted the link between CSA and becoming a victim of sexual and physical assault as an adult. They offered several explanations for this increased risk. They pointed out that CSA survivors might apply ineffective or dysfunctional skills in developing and maintaining relationships. These deficits interfere with correctly appraising risk and making sound judgements. CSA survivors also may experience symptoms of unresolved traumatic stressors (e.g., depression, dissociation, anxiety, post-traumatic stress symptoms and substance abuse) that interfere with judgement, problem solving or ability to defend oneself (Nishith et al., 2000). The authors added that common problems associated with CSA (emotional lability, inappropriate self-soothing behaviour, poor interpersonal boundaries) might increase the likelihood of putting oneself into risky situations. Finally, they also indicated that environmental stressors related to poverty (e.g., poor neighbourhood) might increase risk of further victimization (Nishith et al., 2000).

The preceding section reviewed the psychological processes associated with victimization. It is easy to understand how an individual, when faced with the stress of a random negative event, can have trouble coping. Further, severity, individual differences and social support appear to moderate the depth of the effects of victimization. In the subsequent sections, the paper focuses on some of these issues surrounding these areas.

2.2 Trauma sub-groups: The role of severity

Although much of the current document will examine victims of crime as a whole, there is some evidence that shows differences in reaction to victimization. As noted above, there are differences between victims of property and person crimes (Norris et al., 1997). Victims of non-violent crime do experience fear for their safety and may also experience increased psychological symptoms, however victims of violent crime show more pronounced fears and symptoms. Recall that Norris et al.'s (1997) results indicated that violence severity affects distress. They found no specific profile of distress for any of the victim groups. This is an important finding as it indicates that specific crime victim sub-groups (e.g., domestic violence, sexual assault, violent assault, property crimes, corporate crime) may be less important than the severity of the crime. It is through severity that the victim is traumatized and experiences distress. Recall that Norris et al. (1997) found that victims of violent crime show the

most severe reaction, with over 50% experiencing moderate to severe distress. These results indicate that the link between victimization and reaction may be important only as it relates to crime severity. In other words, the more severe the crime, the more severe the reaction.

This hypothesis is supported by research by Gilboa-Schechtman and Foa (2001) who examined victims of violent crime. In examining victims of assault, these authors distinguished between victims of physical assault and victims of sexual assault. They found that sexual assault victims had more severe reactions than non sexual assault victims. They found that sexual assault victims had a stronger reaction and took significantly longer for trauma symptoms to reduce. They also found a similar reaction between to two groups with respect to post-traumatic stress disorder (PTSD) and anxiety. However, only sexual assault produced depression (Gilboa-Schechtman & Foa, 2001).

These same researchers also examined a phenomenon called "peak reaction" (Gilboa-Schechtman & Foa, 2001). Peak reactions refer to the point in which the victim experiences the strongest symptoms. They found that delayed peak reaction was related to increased symptoms. Victims whose peak reaction occurred shortly after the assault had lower levels of depression and PTSD than individuals whose peak reaction occurred later. They theorize that delayed peak reaction may be related to a delay in engagement, which has implications for treatment. The finding that long-term PTSD was related to the timing of peak avoidance (similar to lack of emotional engagement) further supports this hypothesis (Gilboa-Schechtman & Foa, 2001). Thus, severity may be the important issue in looking at crime victim's reactions, not the specifics of the crime. From a psychological perspective this interpretations is attractive as it points to commonality in the underlying cognitive and adaptive (coping) processes.

2.3 Cognitive processing effects of trauma

To date there has been very little research examining cognitive changes related to crime victimization. One would prefer to see research on issues of how cognitive processes such as memory (short and long term), perception, problem solving, decision-making, etc. might change as the person moves from a pre-victim state, immediate effects of the criminal act to post-victimization period. However, most research has focused on specific symptomatolgy and on coping strategies related to victimization. These issues are related to cognitive changes, but do not specifically examine how victimization affects the cognitive structure of the individual. However, coping and symptoms are both important in that we can extrapolate certain underlying cognitive changes. The current section will adopt a conservative perspective on what is meant by cognitive change. Specifically, cognitive change relates to changes in perception, interpretation, problem solving and decision-making related to crime victimization. Coping responses stand as an outflow of cognitive changes.

Possibly one of the most useful pieces of research that specifically examines cognitive changes in victimization is a multi-method study conducted by Greenberg and Ruback (1992). These researchers used surveys, official data and quasi-experimental methods to examine people's reactions to being victimized, subdividing crimes into theft, burglary, assault and sexual assault. They examined several outcome variables to examine the underlying cognitive processes associated with victimization. These outcomes included: deciding to report the crime, susceptibility to influence and the impact of emotions on decision-making. First, in relation to deciding to report a crime, they found that victims tend to be the one who reports the crime (Greenberg & Ruback, 1992). Although this may seem to be a simple finding, it has important implications. If decision-making is compromised after victimization, the

victim may not be in the best state to decide how best to proceed. In examining reporting the crime, the percent of victims deciding to report can range from as little as 24% for battered women to as high as 96% for sexual assault victims (Greenberg & Ruback, 1992). In understanding why people report the crime to authorities, they found that crime and situational variables are more important than personal variables. This is consistent with research on sexual assault, wherein knowing the perpetrator (acquaintance, date, and marital sexual assault) seems to decrease reporting and help seeking (Ullman, 1999). In addition to directly impacting victim's reluctance to report, Campbell et al. (1999) reported victims who know their perpetrators have more difficulty obtaining services and may be more at risk for negative reactions such as victim-blaming. It is understandable that victims may be reluctant to report if they fear this reaction, especially if they first seek out the advice of significant others who are unsupportive (Greenberg & Ruback, 1992; Nolen-Hoeksema & Davis, 1999). Thus, crime characteristics and situational variables appear to be used by the victim to determine whether or not to report a crime, but advice from others is also a very important factor.

When the characteristics of the crime and situation are held constant, victims are very susceptible to social influence with respect to reporting (Greenberg & Ruback, 1992). In their surveys, they found that most victims spoke to others, to seek support and advice, before contacting authorities. Using a field quasi-experimental design wherein naïve research participants had their payment "stolen", these authors found that 58% of the "victims" followed the advice of confederates regarding reporting. Non-reporters followed the advice 77% of the time and reporters 50% (Greenberg & Ruback, 1992). The authors point out that these results are particularly interesting given that the advice came from total strangers. However, they also found if the stranger was also a "co-victim" (a confederate of the researchers who also had his or her money stolen), it increased the likelihood of following advice. In other words, if the "co-victim" minimised the crime, and said they were not going to report, then the victim typically agreed. With respect to differential reporting, their survey research showed rates of reporting of 85% for burglary, 88% for theft and 90% for sexual assault. Advice from others also seems to affect how active the victim will be in the criminal justice process over the long-term (Greenberg & Ruback, 1992).

One reason victims may seek and follow advise is because they recognize that they are in a stressful state which may affect their normal cognitive functioning and result in poor decision-making (Casarez-Levison's Victimization/ Disorganization Stage). Across several studies and methods, Greenberg and Ruback (1992) found that anger and fear were the most common emotional responses to victimization. These emotions may have an effect on cognitive skills. Anger seems to be related to the underlying belief or cognition that one has been wronged and fear is associated with the belief or cognition that one is vulnerable. Furthermore, these emotions/cognitions were related to behaviour. Anger was more likely to occur with property crime victimization and was directly related to reporting (i.e., the more angry the person the more likely they were to report the crime). Thus, the belief that one has been wronged may increase reporting behaviour. Fear, on the other hand, was more related to sexual assault. However, Greenberg and Ruback (1992) indicated that there is a gender effect in that women tend to be more likely to report feelings of fear than men, even with respect to property crimes (Greenberg & Ruback, 1992). There are two possible explanations to this sex difference. Either women actually do experience fear more often as a result of criminal victimization, or men are more reluctant to report fear, even if they feel fear (perhaps from the perspective of social desirability). In any case, it is clear that fear of crime or fear related to hypersensitivity regarding future victimization is a common reaction.

With respect to perception, Greenberg and Ruback (1992) found that crime victims tend to be more accurate in same-race identifications and that self-reported confidence and accuracy are not strongly related. However, they did find that victims who were accurate in their description of the thief initially, remained accurate. Further, in a 2-month follow-up they found that those who reported crime were more accurate and confident than non-reporters in their description of offenders and specific details about the theft. With respect to accuracy of reporting, Stillwell and Baumeister (1997) randomly assigned students to take the perspective of a victim, a perpetrator or a neutral stance (control) in a story that focused on a betrayal of a promise to help another student study. They found distortions in the initial retelling of the story after an interval of 3 to 5 days. They found that both victims and perpetrators re-told the story, casting themselves in the more sympathetic role. Specifically, perpetrators were more likely to focus on extenuating circumstances and victims were more likely to focus on the negative impact of the behaviour and distorted the event to make the event seem worse. It is interesting to note that these researchers found that perpetrators and victims distorted to the same degree, but in different directions. That this study was closer to true laboratory experiment wherein there was no true victimization limits its applicability to the present discussion. However, it is important to note that these researchers asked each group to provide an accurate account of a relatively innocuous story and those who took a particular perspective spontaneously introduced bias favouring their position (Stillwell & Baumeister, 1997). Given that there is little motivation for either group to distort, these authors conclude that memory and recall is affected by perspective.

Finally, Greenberg and Ruback (1992) reported a small, but interesting, effect of anger related to accuracy and confidence in the victims report. Victims who reported more anger at the time of the theft were more accurate and confident in identifying the offender. This has interesting implications for underlying cognitive-emotional processes related to encoding and memory. One hypothesis might be that the arousal associated with anger (hypervigilance, attention to threat, etc.) may help "imprint" specific details and influence encoding into long-term memory. An alternate hypothesis may involve the importance the victim places on the event. Anger is often a reaction to feeling that one has been wronged. This "righteous" anger may motivate the person to maintain certain details of the crime in his or her memory, thereby improving recall. These memory/recall differences are an interesting result for understanding post-crime behaviour.

As Greenberg and Ruback (1992) indicated, many researchers and clinicians view decision-making ability as compromised when the person is under stress, especially the extreme stress associated with victimization. In developing a model of crime victim decision-making these authors point out that victims will often not consider all possible options and pick the best but, rather, focus on the first option that meets their minimum requirements. They note:

> The option the victims choose to examine first probably depends on the option's momentary salience or availability, which is, in turn, a function of characteristics of the victim (e.g., previous experiences and self-concept) and the situation (e.g., access to a telephone and identification of suspect). The examination of the option itself is likely to be cursory, with the final choice often appearing to the victim as 'automatic' or 'reflective'. (Greenberg & Ruback, 1992, p. 196).

They developed a model of decision-making that has several stages wherein the victim is faced with a decision-making task at each step (Greenberg & Ruback, 1992). All stages are influences by external pressures of information, social norms and social/emotional variables.

> Stage 1: Was the event a crime? This is influenced by the person's definition of crime and the match between this personal definition and the characteristics of the current event. If the person decides it is not a crime, no action is taken. If yes, then they move to the second stage.
>
> Stage 2: How serious was the crime? This is influenced by the person's emotional reactions (arousal and distress) and perceptions of expected, actual and potential harm. These factors influence the perception of being wronged and vulnerable.
>
> Stage 3: How will I deal with the crime and my victimization? The person bases the solution on their stored knowledge and their attitudes towards different options. Greenberg and Ruback (1992) postulated four possible solutions: do nothing, notify police, re-evaluate the situation and seek a private solution.

Thus the person/victim moves through these stages in understanding their experience. From the above discussion, the importance of emotion, others' reactions and prior learning can have a profound affect on this decision-making process. Furthermore, one can easily extrapolate this model to include how victims seek support, rather than simply reporting. To generalize the model, victims, under the distress of being harmed, will likely take the same approach in seeking help or receiving services. The concern is that if victimization has compromised this decision-making, then the victim may not choose the best solution. In an effort to "put it behind them" they may take the first solution that allows them to avoid or ignore their victimization and possible trauma. More on this topic will be discussed in subsequent sections.

Other researchers have examined cognitive changes in combat veterans who have post-traumatic stress disorder that may be generalized to crime victims. Litz, Orsillo and Weathers (2000) theorized that PTSD patients are not generally numb and unresponsive, but that periods of high emotion from trauma cues cause problems in emotional processing. In other words, when trauma reminders result in distress, those with PTSD are more reactive to negative cues and experience less intense positive feelings. Further, they tested a model that theorized that in trying to cope with trauma, people would alternate between problematic thoughts (intrusion) and denial/numbing until they have resolved the trauma. It is believed that such alternating in thinking/feeling events helps the person cope with the trauma by stopping him or her from being overwhelmed by intrusive thoughts and feelings (Litz et al., 2000).

To test this theory, Litz et al. (2000) exposed two groups of Vietnam combat veterans (with and without PTSD) to trauma-related video and to a neutral comparison video. After the video they assessed the veteran's emotional reactions to a set of positive, neutral and negative photographs and measured reactions via monitoring of peripheral autonomic activity, expressive-motor responses, and self-reported emotional reactions. After exposing the two groups to the neutral video, both groups responded in a similar manner to all photographs. After exposing both groups to the trauma-related video, there was no indication that those with PTSD suppressed emotional responses. However, they did find that after trauma-related exposure, those veterans with PTSD were less responsive to the

positive photographs. This suggests that reminders of trauma do not necessarily result in the person numbing or blunting their emotions, but it may interfere with their ability to experience positive emotions (Litz et al., 2000). Thus, the veteran's intrusive thoughts may be interfering with his or her ability to appropriately perceive and/or interpret positive stimuli. One caveat to this research is the finding that combat veterans do seem to handle trauma differently than civilians (Brewin, Andrews & Valentine, 2000). Thus, it is possible that gender issues, military screening, social support (natural and professional), economic resources or combat training influence the manifestation of PTSD. It would be useful to replicate this study among different groups of crime victims to see if the underlying cognitive-emotional processes are similar.

Finally, cognitive models of coping with negative life events may be useful in this discussion. Greenberg and Ruback (1992) described a model wherein the person works to develop cognitive "simulations" of possible events to practice coping strategies or to cope after a stressful event. These simulations also help the person problem-solve and regulate emotions by helping them to understand the event and avoid future victimization. Greenberg and Ruback (1992) indicated that the majority of victims display this strategy when they report that the victimization "could have been worse" or engage in revenge fantasies. Further, these authors point out that creation of these simulations, or fantasies, may motivate the person into taking action if the results of the simulation are positive. Anticipatory feelings of satisfaction could encourage the victim to go to authorities or seek further help. However, anticipatory fears of failure would have the opposite effect. Under this model, the motivational strength of "righteous anger" cannot be underestimated, as it is more likely to motivate the person to action (Greenberg & Ruback, 1992). Thus, treatments that focus solely on anger reduction may do a disservice to some victims who need the anger to help maintain motivation and a sense of control. In fact, anger may help the victim cope with certain difficult elements of the criminal justice process. However, this does not mean that intervention should overcompensate in the other direction to increase feelings of anger, perhaps under the guise of "empowerment". Chronic anger can be negative and very detrimental to the victim, if it is not handled properly. The managing of angry emotions is a delicate clinical issue that cannot be covered in a blanket statement. The one conclusion is that each victim needs to be treated as an individual, helping them learn to manage all emotions in a way that help them cope with challenges while remaining healthy. This balancing act has profound implications for public education, victim education and service delivery.

2.4 Coping strategies

Coping can be defined as:

> determined by cognitive appraisal. The central function [of coping] is the reduction of tension and the restoration of equilibrium. We have to distinguish between coping that is directed at managing or altering the problem causing the distress (problem-focused) and coping that is directed at regulating emotional response to the problem (emotion-focused) [bracketed information added] (Hagemann, 1992, p. 61).

The literature often distinguishes between negative coping that does not focus on the stressor (e.g., blaming others, withdrawal, resignation, self-criticism, aggression, wishful thinking) and positive coping strategies that focuses on self-change or changing the problem (e.g., social support, problem-solving efforts, seeking information). Dempsey (2002) found that use of negative coping techniques and exposure to violence was predictive of PTSD, anxiety and depression.

Furthermore, the victim may be coping with several different things at any one time: the shock of being a victim, the new (or repeated) experience of dealing with the criminal justice process, trying to make meaning of why they were victimized, reactions to others, attempting to return to a normal, previctimized state, dealing with the blow to the belief in a just and predictable world, self-blame and a myriad of other feelings, thoughts and socio-environmental pressures. Thus, one might expect that a major aspect of cognitive change relates to how the victim copes with the crime. Calhoun and Atkeson (1991) point out that as the victim starts feeling better, he or she needs fewer coping strategies or uses them less often, a possible indication of internal cognitive changes taking over for coping strategies. This section reviews some of the major coping behaviours and strategies employed by victims.

Use of social support

As noted above, when victimized the person often feels disorganized and out of sorts (Casarez-Levison, 1992) and will often seek others for support (Greenberg & Ruback, 1992; Leymann & Lindell, 1992; Norris et al., 1997). Everly et al. (2000) indicated that helpful social supports could provide information, companionship, emotional support and instrumental support. As Nolen-Hoeksema and Davis (1999) pointed out, receiving positive social support after a trauma is related to better adjustment. Researchers have distinguished between these several types of social support (Leymann & Lindell, 1992). Emotional support is characterized by a focus on esteem, concern and listening with a focus on the victim's feelings and emotional reactions. Appraisal support focuses on social comparison, affirmation and feedback targeted at helping the victim make sense of his or her experiences. Informational support focuses on advice, suggestions, directives and information that the victim might need. Finally, instrumental support focuses on tangible support such as money, shelter, time or effort (Leymann & Lindell, 1992). For example, although police and other members of the criminal justice system may not be emotionally supportive (Campbell et al., 1999) they may be more supportive with respect to providing information or offering tangible support through investigation (Norris et al., 1997). Furthermore, Greenberg and Ruback's (1992) decision-making model included social comparison (appraisal support) and information seeking (informational support) and their research reinforced the strong influence bystanders can have on the victim's decisions in providing these forms of support.

In discussing both natural (family, friends, peers) and professional supports (police, medical professionals, mental health workers), Norris et al. (1997) noted that victims benefit from talking to others about their experience. They indicated that victims seem to want to tell the story of their trauma over and over and to express their feelings about the trauma. Greenberg and Ruback (1992) discussed this retelling as the victim developing simulations to help makes sense of his or her victimization. This tendency may be the victim's attempt to gain understanding about the trauma and confirm their reactions with a trusted other (appraisal) or simply to share the emotions related to victimization (emotional). It is also possible that they want confirmation that their behaviour and actions during the crime were reasonable and correct (Nolen-Hoeksema & Davis, 1999). In a sense, talking to supports can result in the person re-framing their victimization experience so that they feel better about their behaviour, relating to the concept of cognitive simulations discussed above (Greenberg & Ruback, 1992). Recall, that social support seems to be very important in crime victim decision-making.

Information seeking

As noted above, victims may attempt to cope using social support, but the goal of the support can vary. Seeking information is one way victims try to cope with victimization (Hagemann, 1992). This may,

as Greenberg and Ruback (1992) held, help the person make decisions regarding further action. Information may also provide further direction regarding status of a criminal case, learning new kills, identifying treatment resources or a host of other issues the victim believes are salient to his or her well-being. Unfortunately many victims may have difficulty accessing appropriate information (Campbell et al., 1999). Critical Incident Stress Management (discussed in a subsequent section) is one potential method of meeting this need for information (Everly et al., 2000; Turner, 2000).

Cognitive Reframe of victimization: Emphasize the positive aspects of having survived

In research on sexual assault victims, Hagemann (1992) noted that some victims seem to benefit from being able to label their status as victim or survivor of sexual assault. In fact, Thompson (2000) examined sexual assault victims who had not received help and found that some women initially embraced the label victim because it was linked to a lack of blame and responsibility. However, through a process of adjustment, they switched to the label survivor because of positive connotations including strength, recovery and being a fighter. This self-talk and self-labelling are important cognitive strategies that help some victims regain a sense of understanding of the crime and control over their life. These findings seem similar to those of Davis et al. (1998) who noted that people adjusting to loss often use two related cognitive strategies: a) making sense of the event and b) finding benefit in the experience. Further, these authors indicate that meaning-making is more important early in adjustment, whereas perceiving benefit is a longer term process. If this process were confirmed empirically among victims, it could be used to assess progress (rather than simply a reduction in symptomatolgy).

Cognitive Reframe of victimization: Self-comparison

Not only do victims seem to benefit by redefining themselves as survivors, some victims also seem to be able to focus on the strength associated with successfully coping with trauma (Thompson, 2000). Research by McFarland and Alvaro (2000) supported this view. They found that victims were more likely to report greater improvement in their personal attributes after traumatic life events than after mild negative life events. However, acquaintances of these victims did not note the same dramatic changes. Through a series of studies, these researchers concluded that victims tend to degrade their pre-trauma strengths in an effort to see positive growth resulting from trauma (McFarland & Alvaro, 2000). In a sense, in the process of meaning-making victims will work to preserve the concept of growth. The philosophy embraced by some victims appears to be: that which does not kill you, makes you stronger.

Reframe victimization: Social comparison

Victims will often engage in upward or downward comparison to understand and cope with their victimization. Upward comparison relates to comparing oneself to other victims that are better off. Thus, these individuals seem to act as inspiration to other victims (Greenberg & Ruback, 1992). However, there is also the risk that these "models" may leave the victim feeling disheartened about their own state, feeling that they can never make that much progress. Downward comparison refers to comparing oneself to those who are worse off. Thus, victims may find solace that their victimization did not leave major physical scares or that their loss was not as great. Both of these processes will likely help victims improve their understanding of their victimization, but it appears that downward comparison helps the victim feel better (Hagemann, 1992; Greenberg & Ruback, 1992; Thompson, 2000). It is noteworthy that when such negative models are not immediately available, victims will

create scenarios wherein they received even greater physical, emotion or personal damage (Greenberg & Ruback, 1992). This internal "it-could-have-been-much-worse" exercise seems to help the victim gain perspective, and may even relate to a focus on the positive aspects of being a survivor (Thompson, 2000). Ultimately, the goal of this activity is to learn acceptance of one's own victimization experience (Hagemann, 1992), a goal in some treatment approaches (Layne et al., 2001).

Activities in service of regaining control

Victims, in their attempt to regain feelings of control and safety can also take specific action to regain control. Hagemann (1992) indicated that some victims take self-defence classes. One could argue that pursuing the perpetrator through the justice system also helps the victim alleviate his or her loss of control (Greenberg & Ruback, 1992).

Activism

Some victims seem to gain benefit from becoming victim advocates or activists (Hagemann, 1992). It appears these victims take their victimization from a personal to a more social level, trying to change elements of society they feel contributed to their victimization.

Avoidance: Active Behavioural Avoidance

Avoidance can manifest as behavioural avoidance, such as staying in apartment or taking time off work (Hagemann, 1992) or avoiding through self-medication, using alcohol and drugs (Everly et al., 2000; Hagemann, 1992; Mezy, 1988; Wolkenstein & Sterman, 1998). Generally speaking, researchers agree that such approaches are a band-aid solution to the underlying trauma, but they may have an adaptive element by helping the person slowly build on small success experiences. In other words, initial avoidance may allow the victim to take time to "lick their wounds" and gather resources to rebuild their life and deal with other challenges (e. g., the criminal justice system).

Avoidance: Denial and Self-deception

Basically acting as a type of psychological avoidance, denial and self-deception work to help the individual erase the memories, at least temporarily. Thompson (2000) discussed the active blocking of memories and feelings to help cope with overwhelming emotions. Stillwell and Baumeister (1997) indicated that people have a tendency to bias their recall to cast themselves in a more positive and sympathetic light. Mikulincer, Florian and Weller (1993) pointed out how people who use avoidant strategies to cope with trauma are more likely to deny or minimize their internal distress. Although these approaches may hamper help-seeking, they may also minimize initial distress (Hagemann, 1992). Ullman (1999) agreed and indicated that although avoidance strategies (e. g., substance abuse, withdrawal from others) are usually linked to greater problems, they could also be adaptive in helping the victim get through the initial trauma.

Avoidance: Dissociation

Use of dissociation to cope seems to be more common in people with a history of frequent and severe traumatic experiences (Martínez-Taboas & Bernal, 2000). Similar to using substances or psychological defences to reduce trauma memories, Harvey and Bryant (2002) indicated that naturally occurring dissociation might help the victim cope with trauma. They note that dissociation may interfere with memory encoding during the original trauma. This cognitive change allows the victim to

forget particularly difficult elements of the trauma and may result in reduced distress. However, Ozer et al. (2003) indicated that those who experience dissociation either during or immediately after the traumatic experience were more likely to develop PTSD. They noted that this relationship was most evident in those who later requested mental health services. Thus, dissociation may be a double-edged sword, it may help in the short-term, but could place the victim at increased risk for later problems.

Confrontation: Cognitively narrowing the focus

Holman and Silver (1998) pointed out that when people are presented with complex stimuli, their ability to process the information is compromised. Thus, they may cognitively slow down time in the present to cope with all the stimuli. In effect, they cognitively make their subjective world move in slow motion so that they are able to process events. These authors point out that this would be an adaptive response, but that in some cases this "foreshortening" of the future can become maladaptive as the victim becomes focused on the traumatic event to the exclusion of other experiences (Holman & Silver, 1998). Further, recall that Greenberg and Ruback (1992) found that arousal, specifically anger, resulted in improved recall. Thus, the arousal may allow the victim to focus their attention on the specifics of the crime. However, this focus may become maladaptive as the person works to process the victimization as only part of their life experience.

In conclusion, victims have many possible coping strategies at their disposal and their choice of strategy is likely a combination of cognitive skills in problem-solving, history and individual personality variables. The above list is not exhaustive as each person will have their own unique set of thoughts and feelings and these will work in synergy to create coping strategies and behaviours. Thus, there will be as many specific strategies as there are victims. This list serves as a guide to understanding the link between underlying cognitive activities and coping activities. However, one common finding in both research and theorizing is that social support has a major effect on decision-making and subsequent coping. The following sub-sections examine the relative utility of natural and professional supports for victims of crime.

2.4.1 Use of natural supports

The above discussion repeatedly noted the importance of support for crime victims. Support can be primarily emotional, appraisal, informational or instrumental (Leymann & Lindell, 1992), however, it is likely that support encompasses all these goals in differing degrees. Thus, support persons will move from simply listening to the victim, to providing another perspective, to recommending resources to providing food, shelter, money. Obviously the specific manifestation of the support is based upon the previous relationship between the victim and supporter, as well as the level of distress. No matter what the specific nature of the support, support itself seems important to helping ease the victim's distress. Recall the above discussion of the research by Norris et al. (1997) who examined the psychological consequences of crime in a longitudinal telephone survey in Kentucky. These researchers examined activators, reactions, consequences and moderators with respect to the victimization process. In examining natural supports as moderators, they found that beliefs about support availability had a strong impact on reducing depression and anxiety. That is, simply having confidence that he or she could receive support if requested, was enough to help reduce symptoms. This finding is even more profound when combined with the finding that there was no effect for actual received support (Norris et al., 1997). In other words, the person appears to gain stability and support from the belief that help will be available if they need it. If victims access that support, it does not

appear to have an added benefit over knowing that support is available. This may relate to the victim needing to believe the world is safe and will support him or her, rather than the specific supports received from others. This also has implications around the importance of visibility of victim support programs. An examination of the specific types of support shows a differential effect. Emotional and informational support from natural sources showed a positive impact on anxiety. Anxiety is reduced as the victim receives support. Further, perceived social support around replacing the loss associated with victimization reduced both anxiety and depression (Norris et al., 1997). Perceived social support was also identified as important in the development of PTSD, with those who reported more perceived support, also reported fewer PTSD symptoms (Ozer et al., 2003).

These results indicate that the victim need not receive support as long as he or she feels supported by friends and family. One possible explanation for this result is that victimization affects the victim's perceptual world (the world is not safe; people are evil; I'm unprotected; I'm alone) and that beliefs that challenge these perceptions (despite their veracity) have a positive affect on symptoms. This finding is specifically important to the focus of this paper, cognitive effects of crime. This result indicates that cognitive elements alone can improve coping post-victimization. That is, the simple belief (a cognitive element) that one will receive support is enough to buffer the psychological symptoms of trauma, such as anxiety and depression. This conclusion is partially supported by Kliewer, Murrelle, Mejia, Torres de G. and Angold (2001) who found that support from family buffered the negative effects of witnessing family violence.

Not surprisingly, actual received support also reduces the victim's crime-related fear (Norris et al., 1997). These authors interpret this finding as indicating that most family and friends may be able to understand and successfully intervene in crime related fear. Thus, many crime victims can benefit from social support and seem to use any available supports, even strangers, to help them navigate the victimization and coping process (Greenberg & Ruback, 1992). However, people in the victim's natural support system may be less able to assess, and intervene in, problems associated with certain trauma related symptoms, such as depression and anxiety. Other research has found that victims rate natural supports as more useful than professional supports (Leymann & Lindell, 1992). These researchers examined the possible sources of support after armed robbery and subdivided support sources into: primary (natural), public authorities, professional providers, company authorities, judicial functions and curiosity seekers. They found that natural supports were rated the most helpful, public authorities (police, etc.) were second and professional providers (personnel officer, psychologist, nurse, physician) were third. Unsurprisingly, they found that victims rated curiosity seekers, such as journalists and customers, as the least helpful. They also found women reported receiving more positive social support than men (Leymann & Lindell, 1992). Although men did not report as much positive support, they were more likely to be contacted by police for statements.

Although natural supports can be effective and rated highly by victims, there are costs to relying on natural systems. In discussing ruminators, Nolen-Hoeksema and Davis (1999) indicated the very important reality that accessing social networks does not automatically mean accessing support. They found that ruminators, those people who dwell on the crime and their reactions, benefit greatly from social support. Non-ruminators also benefit from support, but not to as high a degree. Despite the potential for great benefit, ruminators tend to report that their support network was inadequate. These authors pointed out that although natural supports may be initially interested in helping the victim, they may grow tired of hearing the same complaints or descriptions. Under this dynamic, natural supports

may encourage the ruminator to ignore the trauma or to put the crime "behind them". Thus the ruminator does not receive the type of support for which he or she is looking. In this case, the natural support is not reinforcing the ruminators preferred coping style and is likely failing at providing the type of appraisal support the ruminator wants (agreement on their chosen course of action). Upon discovering that their supports appraised their actions differently, victims may feel criticized, both for behaviours during the crime or thoughts or feelings they have about the trauma. In other words, seeking appraisal support could result in the person hearing things they do not want to hear. In fact, even when people are trying to be helpful they may do things that hurt rather than help. This may be the result of the natural support preferring different coping strategies than the victim. Thus, if the victim needs emotional support but their friend thinks they need information, this would be experienced as a breakdown in support. The reverse is also true: those seeking information may be frustrated if their support wants to focus on emotions.

In their unique focus-group research with clinicians, Nelson, Wangsgaard, Yorgason, Higgins Kessler and Carter-Vassol (2002) explored the challenge of working with dually traumatized couples (couples in which both partners have a history of trauma). They identified one particularly damaging dynamic they labelled the "preoccupied-dismissing" couple. In this dynamic, partners take complementary positions with respect to how they deal with trauma. For example, one partner may become preoccupied, ruminative or overwhelmed with the effects of the event, whereas the other partner may deny, suppress or dismiss the effects of the event. Thus, it is easy to imagine each partner trying to get the other to adopt his or her own coping style. The result is likely to be both partners will feel unheard and unsupported, potentially exacerbating the original trauma.

Returning to the research on ruminators, Nolen-Hoeksema and Davis (1999) found that although these victims benefit from support, dealing with "nonsupportive others" layers more stress over the original trauma and creates more distress. This impedes the ruminator's ability to improve. Their research indicated that when ruminators reported that their family members or friends were critical of them, did not agree with important decisions they had made, or were otherwise in conflict with them, they experienced more distress. They point out that these negative responses give ruminators more things to worry about and raise more questions about their own behaviours or emotional reactions (Nolen-Hoeksema & Davis, 1999). In contrast, positive support that allowed sharing of emotions seemed to help ruminators cope with their distress and concerns more actively and effectively.

Thus, some victims may find it helpful to seek out professional support. In the ideal world, most professionals have training in listening, providing emotional support, providing information and social comparison. They should also be better equipped to cope with repetitive stories and accounts. Professionals should also be better able to identify and provide the specific support needed by the victim. Furthermore, victims need not be concerned about damaging other aspects of the relationship since the goal of the relationship is focused on dealing with the victimization of trauma. Thus, we now turn our attention to professional supports.

2.4.2 Use of professional supports

As noted above, many professionals can act as support to the victims. Police and criminal justice personnel offer instrumental support in the form of investigation, arrest, prosecution and possibly incarceration and may also provide information, appraisal and emotional support. Medical personnel also provide instrumental support through addressing physical damage and gathering evidence.

Medical professionals may also provide informational support (STDs, victim services contact), appraisal and emotional support, depending on the individual skills and inclination of the professional. Social services and shelters can provide instrumental support through replacing money/goods, providing a safe environment, etc. and may also provide other types of support. Finally, mental health workers can also provide support, typically within informational, emotional and appraisal areas. This section is going to focus on those professionals who provide emotional, informational and appraisal support; typically, these include mental health workers, shelter workers and those in victim services.

In his discussion on the effects of domestic violence, Lawson (2001) indicated that professional support offers recognition of, and education around, the various types of abuse, processing emotions related to the crime, debriefing, skills teaching (communication, conflict resolution), practical planning (e.g., developing safety plans), and identifying and using social support systems. He also noted that professionals could help the victim develop self-esteem, challenge negative societal/familial norms and deal with family issues. In other words, professionals can act as a support to the natural support system, thereby benefiting the client. Gorman, (2001) also indicated that therapists could work within the clients' frame of reference to help them to cope with victimization. The victim can then focus on telling his or her story, rather than trying to convince the support person that his or her perspective is correct. Thus, on the surface, it appears that professionals may offer important supports and strategies that help victims of crime, and perform a complementary function to natural supports.

As noted above, Norris et al. (1997) found that about 12% of victims sought mental health services, with most from the violent crime group. Non-violent victims accessed services at level roughly equivalent to the general population. This equal access between non-violent victims and the general population indicates that they probably did not suffer increased distress because of the crime, but it is possible that the crime was the specific catalyst to help-seeking behaviour. In examining crime victims, the two major predictors of help-seeking behaviour were depression and the use of violence in the commission of the crime. These elements generate a hypothesis that victims who experience more distress are more likely to seek professional support. Thus, it is possible that victims of both violent and non-violent crime, who experience distress, are more likely to seek help. Severity of reaction influences help-seeking behaviour, but so does severity of offence. This finding must be studied in more depth but it makes logical sense. Of note, in receiving services, they also found that professional help was only effective if the help was prompt and continuing (Norris et al., 1997). This is a very important finding, indicating the utility of early intervention for crime victims. However, in an environment increasingly focused on brief interventions, victims may be challenged to identify appropriate services.

In a multinational study, van Dijk, Mayhew and Killias (1991) found that only 3.8% of victims reported that they received any form of victim support, with the United States at 10.0% and Canada at 5.5%. The percentage receiving help was highest among victims of sex crimes (15.1%) and lowest with theft (2.4%). For those victims who did not receive any form of professional assistance, the researchers asked if the victim felt such support would be useful. On average, 35% of victims reported feeling that victim support would have been helpful. Sixty-two percent of sex crime victims reported a desire for help, while 52% of those who were threatened said they would have wanted help. They note that their results regarding desire for support must be viewed cautiously, as there may have been cultural differences in survey interpretation. For example, the researchers noted that some respondents

may have interpreted "support" as financial support (van Dijk et al., 1991), as reflected in a relatively high number (45%) of victims of bike theft reported that they would have liked support.

At this point, it makes sense to briefly review an example of a professional intervention that seems to have empirical support. This treatment approach was specifically chosen to show how cognitive changes could improve the victim symptoms, related to the overall topic under discussion. Resick et al. (2002) completed an outcome study of cognitive-processing therapy (CPT). Over 12 sessions, clinicians teach clients to challenge distorted beliefs (e.g., denial and self-blame), overgeneralized beliefs about oneself and the world and pre-trauma beliefs/assumptions. The client then learns new, more balanced self-statements. CPT also includes an exposure element by having clients write, and share, a detailed account of the traumatic incident. Resick et al. (2002) compared CPT with prolonged exposure and a minimal attention in 171 sexual assault victims. The prolonged exposure group included education, breathing retraining and behavioural exposure to environmental reminders of the trauma and exposure to the trauma memory through imagination. The minimal attention group underwent the assessment procedures only and were phoned every two weeks to see if they required emergency services. After six weeks, the researchers randomly assigned those in the minimal attention group to either CPT or prolonged exposure.

Both CPT and prolonged exposure were successful in treating chronically distressed sexual assault victims. Those in the attention alone did not show any significant improvement. CPT was best at helping to reduce guilty cognitions (e. g., self-blame, feelings of wrong-doing, etc.). A further analysis of this data showed some PTSD symptoms initially became worse before they became better (Nishith, Resick & Griffin, 2002). However, PTSD symptoms show a dramatic reduction after the first exposure session (session in which the victim has to present her or his detailed account of the sexual assault). They indicated that exposure may be an active ingredient of change in professional interventions (Nishith et al., 2002). Thus professional support may offer specific, targeted strategies to help particularly distressed victims to move beyond their symptoms.

One caveat in looking at professional support involves clinical bias. Nelson et al. (2002) indicated that clinicians often assume that people who have experienced a potentially traumatic event will automatically be traumatized. In fact, such a "non-reaction" may be viewed as pathological in and of itself, relating it to dissociation or "shock" (Mikulincer et al., 1993). However, these authors emphasized that clients must be the authority regarding their own reaction. To ignore the client's self-appraisal is to risk being non-supportive, and deepening the trauma response. The clinician must proceed carefully in cases wherein the clinician is unsure about why the victim is not displaying trauma related symptoms. Clinicians may be able to provide therapeutic support and education (Nelson et al., 2002) that help the victim better identify her or his own needs. This alliance allows the victim and clinician to work together towards improvement. The clinician may also be able to help the client, especially those who are particularly distress, through the judicious application of diagnosis. Diagnosis with an identified disorder often helps the victim access services. It is to diagnosis and the medicalization of trauma that we now turn.

2.5 Medicalization of Trauma

2.5.1 Relationship to DSM-IV disorders

As discussed above, victimization and trauma affects each person differently and many victims experience social/communication problems, stress symptoms, anxiety, depression, isolation, poor relationship quality, and reduced intimacy (Nelson et al., 2002). Much of the research discussed has focused on diagnostic categories, especially post-traumatic stress disorder (PTSD). Not surprisingly, the individual's coping strategies mediate the specific problems such as PTSD/anxiety and depression (Byrne et al., 1999; Dempsey, 2002). In a study of the effect of violence on inner-city youth Dempsey (2002) found that the presence of violence in the commission of the crime and negative coping explained 30% of the variance in PTSD, 11% of the variance in anxiety and 20% of the variance in depression. This means that criminal violence and negative coping predict PTSD, anxiety and depression to practically significant, but varying, degrees. This section will review further research related to PTSD/anxiety and depression.

Post-traumatic Stress Disorder (PTSD) and Anxiety

In examining PTSD and anxiety, it must be emphasized that PTSD is a specific type of anxiety. Anxiety and fear can manifest as agoraphobia, other phobias, panic attacks, free-floating anxiety, generalized anxiety and PTSD. Specifically, common symptoms to most anxiety disorders include: fear/distress/worry, physiological symptoms (e.g., sweating, shaking, difficulty breathing, nausea, chest pain, dizziness, etc.), behaviour change (e.g., avoidance, rituals) and behaviours aimed at reducing distress (American Psychiatric Association, 1994). Similarly, PTSD occurs after a traumatic event and symptoms may include such anxiety symptoms as: fear, helplessness, intrusive and recurrent recollections, distressing dreams, reliving the event, intense distress, physiological reactivity; avoidance/suppression of thoughts/feelings, and specific symptoms such as sleep problems, irritability, angry outbursts, poor concentration, hypervigilance and exaggerated startle response (American Psychiatric Association, 1994). The key distinction in PTSD in comparison to other anxiety disorders is the trauma-inducing event. Thus, it is unsurprising that research and treatment initiatives related to coping with traumatic victimization have focused on PTSD.

Anxiety/fear has been associated with workplace violence (Rogers & Kelloway, 2000), sexual assault (Byrne et al., 1999), childhood sexual abuse, (Merrill, Thomsen, Sinclair, Gold & Milner, 2001), critical incidents (e.g., accidents, victimization, war trauma, etc.) (Everly et al., 2000), violent crime (Byrne et al., 1999) and family violence (Wolkenstein & Sterman, 1998). PTSD specifically, has been identified as a relatively common result of victimization (Byrne et al., 1999). Of note, research by Ruscio, Ruscio & Keane (2002) indicated that PTSD does not represent a categorically distinct syndrome in relation to normal distress, but is at the extreme end of a continuum. These researchers indicated that this is important if we want to identify which victims are most likely to require and benefit from clinical intervention. Thus, we should use empirical research and clinical study to identify both the best criteria and the best cut-off for effective identification and service delivery (Ruscio et al. 2002).

One question that is often raised when examining PTSD is why does one person develop the disorder while others do not. Part of this discrepancy is likely due to the assumption of PTSD as a distinct entity, which may not be the case (Ruscio et al., 2002). In any case, certain factors seem to make people more susceptible to developing PTSD; these factors include personal psychiatric history, report

of childhood abuse, and family psychiatric history (Brewin et al., 2000). These authors reported a lesser link between education, previous trauma, general childhood adversity and PTSD. They further noted that gender, age at trauma, and race predicted PTSD in some populations but not in others. Despite these links, they noted that crime/trauma related factors such as trauma severity, lack of social support, and additional life stress, had somewhat stronger effects than these risk factors (Brewin et al., 2000).

Ozer et al. (2003) completed an exhaustive meta-analysis examining the predictors of PTSD and found similar results at Brewin et al (2000). They found that the strongest predictor of developing PTSD was dissociation either during or immediately following the traumatic experience. They indicated that this relationship was strongest in those seeking mental health services and in those studies that had longer elapsed time between trauma and assessment. They found a small to moderate relationship between PTSD and perceived life threat, perceived lack of social support and reporting intensely negative emotional reactions during or immediately after the trauma. Thus, no reaction (dissociation) is predictive of developing PTSD and extreme emotional reactions are predictive of developing PTSD. This indicates that the victim needs to quickly process information, including emotional information, and engage positive coping mechanisms as soon as possible. Finally, Ozer et al. (2003) noted small but significant relationships between prior trauma history, personal psychiatric history and family history of psychiatric problems and development of PTSD in response to trauma. Through a closer examination of the trauma history research they found that there was a moderate relationship between trauma and PTSD if the traumatic event was a crime, as opposed to a natural disaster. Furthermore, in examining different personal psychiatric diagnoses they found that depression was moderately predictive of developing PTSD in response to trauma.

A high level of PTSD after previous trauma also seems to be a risk factor. Brunet, Boyer, Weiss and Marmar (2001) found that 75% of those who had high levels of PTSD symptoms after the initial trauma also reported high PTSD symptoms for a subsequent trauma. This relationship was not observed in those who reported moderate and low PTSD symptoms. Brunet et al. (2001) concluded that clinicians should assess the presence of previous PTSD symptoms and the severity of any previous PTSD episodes when they assess risk of further PTSD symptoms. Similarly, researchers have linked higher heart rare after a traumatic experience to subsequent diagnosis of PTSD, indicating that physiological arousal may be important in the development of PTSD (Bryant, Harvey, Guthrie & Moulds, 2000).

In examining the dynamics of trauma reaction and PTSD, Gilboa-Schechtman and Foa (2001) found that sexual assault victims reported significant PTSD symptoms within the first two months after the assault. In fact, delayed peak reaction (period of the worst symptoms) to a traumatic event has been associated with increased pathology. They theorized that this delay related to being emotionally numb in the earlier phase of coping with trauma and that this individual difference in coping affects subsequent recovery. This finding may also relate to the reported successes with early interventions with PTSD that allow the client to process emotions, develop skills, manage their fears and return to normal daily living (Harvey & Bryant, 2002). In other words, directly addressing the victimization and associated trauma, linked with skill development, appears to be a productive avenue of intervention and study.

Cultural issues may also be important to examine when trying to assess PTSD. Norris, Perilla and Murphy (2001) compared Mexican and U.S. samples with respect to PTSD symptoms after a natural disaster. They noted that the natural disaster were quite similar, both were hurricanes that landed in similar areas and caused similar damage. They found that both samples showed similar relationships between severity of trauma exposure and PTSD symptoms. However, once they controlled for the severity of trauma, the Mexican sample reported higher in intrusive thoughts and avoidance symptoms, whereas the U. S. sample reported higher arousal symptoms. They noted that culture (or environment/learning) might play a role in determining avoidance/numbing and hyperarousal (Norris et al., 2001).

As noted above, PTSD and other anxiety disorders are understandable and treatable manifestations of trauma. In victims, these problems are very intrusive and potentially long-lasting effects of victimization, permeating many aspects of their lives. Similarly, the medical establishment has noted other psychiatric disorders that are related to traumatic victimization. Specifically, the discussion turns to depression as a possible outcome of victimization.

Depression

Often researchers focus on both depression and anxiety in the same research. Similar to anxiety disorders, depression has been associated with workplace violence (Rogers & Kelloway, 2000), sexual assault (Byrne et al., 1999; Gilboa-Schechtman & Foa, 2001; Mezy, 1988), childhood sexual abuse, (Merrill et al., 2001), abuse (Martínez-Taboas & Bernal, 2000), family violence (Wolkenstein & Sterman, 1998), and critical incidents (Everly et al., 2000). Depressive symptoms may include low mood, low appetite/weight loss, sleep problems, energy changes, self-blame/guilt, worthlessness/ hopelessness, difficulty concentrating and thoughts of death (American Psychiatric Association, 1994)

In trying to understand the dynamics of victimization and depression, Daley, Hammen and Rao (2000) noted that episodic stress could help deepen depression but that chronic stress seems to be more related to onset of the first depressive episode, rather than later ones. In other words, a more chronic stressor, such as the stress a victim of family violence may feel, is more likely to wear down the victim. Whereas, an acute stress such as single episode assault by a stranger, may deepen feelings of depression. They indicate the need for research to clarify the changes that occur in the relationship between stress and depression over the course of the disorder (Daley et al., 2000).

Although they related it to severity of crime, Gilboa-Schechtman and Foa (2001) noted that victims of sexual assault, versus non-sexual assault, were more likely to experience depression. They theorized that anxiety and PTSD are common to all traumas, but that depression is related to only certain types of trauma. They noted:

> Because most of the parameters of emotional reaction were more severe following sexual assault than following nonsexual assault in both data sets, it remains possible that the differences we have identified between the two types of assault are attributable to rape being a more severe trauma than nonsexual assault (Gilboa-Schechtman & Foa, 2001, p. 398).

This severity-depression link is consistent with clinical expectations, since severe trauma is more likely to threaten the core of the individual. The simultaneous experience of fear and anxiety that might be associated with all types of victimization and trauma works to deepen distress. Thus, as others have

noted (Mikulincer et al., 1993), we need to recognize the role of intense distress in the potential development of depression and other pathologies in victims.

An interesting theory links depression to the finding that having a history of previous victimization results in an increased chance of re-victimization. Daley et al. (2000) noted that depressed individuals have characteristics, or behaviours, that increases their likelihood of experiencing stressful events. This is referred to as stress generation. Although one must be aware of the slippery slope related to "victim blaming", it does make sense that depressive symptoms such as self-blame/guilt, worthlessness/ hopelessness, and difficulty concentrating interfere with the use of normal coping and problem solving. The depressed person's tendency to use negative and self-deprecating thinking is likely to interfere with any attempt to positively interpret events in their life (Davis et al., 1998). Thus, the person continues in a downward spiral, wherein failure experiences heighten susceptibility to further depression.

Depression and anxiety seem to be the more common diagnoses associated with trauma and victimization. PTSD is uniquely linked to victimization in requiring a specific event or events that relate to the anxiety symptoms as part of its diagnostic criteria. The reader should keep in mind that these diagnostic categories are more related to extreme reactions to trauma and victimization. However, in any criminal event, there are a multitude of variables that may affect the victim, including victim-perpetrator contact, use of weapon, use of violence, witnessing versus experiencing the crime, etc. Further, each victim has a particular history, resiliency and coping ability that may affect how he or she experiences and copes with victimization. This uniqueness makes group interventions an interesting challenge. The next section focuses on the characteristics of Critical Incident Stress Management to victimization as a method to prevent subsequent trauma and pathology.

2.5.2 Application of Critical Incident Stress Management

Critical Incident Stress Management (CISM) offers one possible intervention that may be useful in helping crime victims quickly receive information, access services, and avoid deepening of negative symptoms (Everly et al., 2000). CISM arose out of a merging of crisis intervention models and group psychological debriefing techniques and represents a range of interventions (Everly et al., 2000). CISM appears to be applicable to all stages of the crisis. *Precrisis preparation* or training can be important for those people who are at increased risk of being victimized, this would include bank personal, personal care workers, etc. After mass disasters or riots, *large- scale procedures* can be mobilized to help victims cope with the immediate effects of the trauma. In certain cases, *individual acute crisis counselling* may be employed to help victims who need more intensive attention (e. g., primary victims or those experiencing profound reactions). *Defusings* are brief small group discussions that focus on imparting very specific information. *Critical incident stress debriefings* are longer small group discussions wherein the leader goes into more detail and there is more opportunity for group members to share experiences. In some cases, *family crisis intervention techniques* may be employed to help the victim and his or her family cope with the repercussions of the crime. Finally, in recognition that CISM is not the same as therapy, *follow-up procedures*, and/or *referral for psychological assessment or treatment* may be needed to help those victims who continue to experience difficulty (Everly et al., 2000). There are several versions of CISM offered, but there appears to be some common elements that are important: cathartic sharing of the story, social support, and adaptive coping. Sharing the story and social support are important function of group interventions, and can be very powerful for participants (Foy et al., 2001). Adaptive coping training

may include both cognitive and behavioural elements and focus on information processing, cognitive appraisal, expectations, and skill development (Everly et al., 2000). It is noteworthy that CISM began as an attempt to help caregivers and trauma workers deal with the stress associated with dealing with critical incidents and was not originally developed to help primary victims. Thus, it may be best applied to shelter workers or others dealing with victims. However, it has been generalized to direct victims of trauma (Everly et al., 2000).

As Everly et al. (2000) reported, there are several models of CISM, which emphasize, to varying degrees group process, cognitive problems, decision-making, emotional problems, interpersonal relationships, symptom management and information. These interventions focus on helping people make the transition back to everyday life in an attempt to minimize the negative effects of the crime-related trauma. With respect to crime victims, this model would be most applicable to groups of victims, such as hostages, since the group nature of CISM is important. In fact, these approaches are often quite popular in these cases as they represent an attempt by the system to address potential problems associated with trauma (Kenardy, 2000). CISM may be less useful to victims of individual trauma, as the crime-specific characteristics are important mediators to severity of reaction. However, the principles may inform individual intervention and education efforts with victims and are clearly applicable to those working with victims.

In discussing crisis intervention initiatives for victims of sexual assault, Calhoun and Atkeson (1991) indicate that many victims are reluctant to seek out full-fledged treatment in the first few months following victimization. However, these authors indicate that brief crisis-intervention models may help the victim express initial emotions, allow information sharing, identify and secure social support, anticipate future problems, develop feelings of safety, cope with daily demands, mediate with medical/legal agencies and, perhaps most importantly, arranging follow-up. Thus, the goal of crisis intervention is to help the victim adjust to the immediate stress of victimization but not specifically address possible long-term consequences (Calhoun & Atkeson, 1991). This more modest approach may be more practical and realistic than trying to minimize development of post-traumatic stress.

In a small pilot study, Foa, Hearst-Ikeda and Perry (1995) compared a matched assessment-control to a brief cognitive-behavioural program (2 hours per week for one month) for victims who experienced PTSD symptoms as a result of sexual and physical assault. These authors focused on participants who met the criteria for PTSD, except the requirement of symptoms present for at least one month. The program focused on exposure, relaxation training and cognitive restructuring and occurred within one-month post victimization (mean of 15 days). At the end of the month, 7 of the 10 women in the treatment program showed a reduction of symptoms to the degree that they would no longer meet the altered criteria for PTSD and showed a mean reduction in severity of 72%, as rated by independent evaluators. Only 1 of the 10 women in the assessment control group no longer met altered criteria for PTSD and the mean reduction in severity was rated at 33% (Foa, Hearst-Ikeda & Perry, 1995). These impressive results support the argument for early treatment, however the small sample size indicates the use of caution in over interpreting the results. Of note, this program also does not fall under the umbrella of crisis intervention as most participants began two weeks after the assault.

Frank et al. (1988) indicate that those who seek immediate treatment do not differ substantially from those who seek treatment later, and both groups benefit from treatment. This is consistent to other researchers who find that victims may show a reduction of symptoms regardless of length of time

between victimization and treatment (Resick et. al., 2002). Thus, the timing of treatment may simply reduce the amount of time the victim must live with distress, a worthwhile goal (Frank et al., 1988). Recall, however, that clinicians and others must respect the victim's self-appraisal regarding his or her reaction to criminal victimization (Mikulincer et al., 1993). This is especially important in that professionals do not want to cause more distress by pursuing already traumatized victims. Such a break in empathy could replicate the differential power imbalance the crime victim felt when being victimized and create further difficulties, reducing the likelihood of later treatment seeking. Thus, clinicians must be sensitive to the needs and wishes of the victim with respect to receiving crisis services or treatment.

It is important to note that we are far from universal agreement on CISM's utility for any trauma victims. Several researchers have indicated that there is little solid empirical evidence that CISM or debriefing reach their desired goals (Everly et al., 2000; Kenardy, 2000; Turner, 2000). Everly et al. (2000) indicated the need for improved operational definitions of traumatic events, psychometrically sound standardized outcome measures and standardization of intervention procedures. However, general proponents of CISM concluded that there is enough evidence to make some firm conclusions. First, trauma and post-traumatic stress are linked in many victims. Second, there is some positive support for the efficacy of CISM in alleviating psychological distress associated with trauma. Third, there is a need for solid empirical research and outcome research on CISM. Fourth, there is a need for more on-site, field research examining the utility of CISM. Finally, decision-makers must support research, especially research that focuses on the possible negative effects of CISM (Everly et al., 2000). This is important as one major debate in the literature relates to those who believe that CISM procedures, especially defusing and debriefing, interferes with the person's natural healing process and may even deepen trauma (Kenardy, 2000). Sound empirical research is obviously needed to tease apart the relationship between trauma, trauma interventions and subsequent recovery.

If proven effective, CISM could offer an inoculation effect for crime victims. At first glance, it offers a quick and consistent way to impart information, link victims to services, identify symptoms and help the victim make an informed decision regarding whether he or she requires help. However, the caveats related to the limits of CISM noted above should not be ignored. Although severity appears to be a common factor to trauma reactions, victims are a heterogeneous group. Clinicians risk deepening trauma by mixing severity levels. Social comparisons, such as upward and downward comparison, may have adverse effects on the victim, requiring sensitive management on the part of the clinician. Individual differences in coping also have an effect on how the person deal with both the victimization, but also on how they deal with offers and extensions of help. Further, early treatment may have a positive affect on the victim, but needs to be approached with caution. One must understand that victim reaction is based on a mixture of crime characteristics (violence, sexual assault, severity, etc.), social characteristics (comparison, support, etc.) and the victim's own pre-trauma characteristics. Pre-trauma characteristics are the focus in the next section.

2.6 Effect of pre-trauma characteristics on coping and recovery

The discussion to this point has noted many individual differences in dealing with victimization. Crime victims can, to differing degrees, engage in specific help seeking, coping or information seeking behaviours. Cognitive changes related to victimization may affect how the person makes these decisions. However, it is also likely that victims under stress will return to well-used coping strategies and cognitive sets. Cognitive sets are defined as well rehearsed thinking and problem-solving patterns.

In other words, they are likely to apply pre-trauma strategies to coping with victimization, rather than spontaneously developing new approaches. This natural tendency is addressed by treatments that often incorporate skills training and cognitive therapy to help the victim cope with victimization (Resick et al., 2002). However, this section focuses on those pre-trauma characteristics that may affect how the victim manages their reaction to trauma or criminal victimization. Specifically, this section reviews victim history, personality characteristics and demographic characteristics.

Victim History

As noted above, previous victimization is an important factor in both predicting subsequent victimization and in predicting more severe reaction (Brewin et al., 2000; Byrne et al., 1999; Messman & Long, 1996; Norris et al., 1997; Nishith et al., 2000). Clinically, successful resolution of previous victimization should affect how they cope with any subsequent victimization. Brewin et al. (2000) found that report of a history of childhood abuse increases the victim's risk of developing PTSD. These researchers also noted a lesser link between higher PTSD and general childhood adversity and trauma. Furthermore, those victims who have suffered from high levels of PTSD symptoms resulting from a previous trauma are at increased risk of developing PTSD in subsequent trauma (Brunet, Boyer, Weiss & Marmar, 2001).

As noted above, some researchers indicated that previous victimization, especially childhood sexual abuse, might be linked to subsequent victimization because of cognitive appraisal deficits (Nishith et al., 2000). Messman and Long (1996) indicated that cognitive, personality and behavioural problems that arise out of victimization could interfere with subsequent problem solving. It is important to note, cognitive problem-solving problems would have broad effect. Briefly, if a child (or adult) is victimized, it will affect his or her world-view. This will then become part of the normal cognitive map he or she uses to make decisions, solve problems, cope with disappointment, build relationships and cope with normal daily challenges. Victims would also have a broader cognitive map of what is "normal" behaviour in their world and not know when or how to intervene. The result of this problem in appraising situations is that they may tend to place themselves at higher risk through both conscious and unconscious choices. Subsequent victimization would serve to deepen this learning, reinforcing the maladaptive pattern. Furthermore, the deficits in problem solving may result in their employing maladaptive coping mechanisms, such as avoidance using alcohol and drugs, rather than efforts targeted toward changing the situation. Poor decision-making would also reduce the likelihood that they would recognize when they needed help, or to seek help. This ineffective style may result in a deepening of PTSD symptoms, which would make them more susceptible to PTSD in subsequent victimizations or other trauma. Thus, victims may get caught in a downward spiral even as they focus all their skills and resources on getting better. It is important to emphasize that readers should not view this as victim-blaming but, rather, as an explanation of how people may become trapped in the victim role. However, victim personality can play a major mediating role in how the victim reacts to the crime, manifests symptoms and uses coping skills.

Personality characteristics

Throughout this paper, the interaction between personality characteristics and trauma has been noted when discussing other issues related to victimization. Recall that ruminators tend to seek out social support, and benefit from social support but often report feeling unheard (Nolen-Hoeksema & Davis, 1999). Davis et al. (1998) noted that the fact that some victims are able to identify positive elements of being a survivor is related to the dimension of optimism-pessimism, with optimists being more likely

to report positive change. Other researchers have identified self-efficacy as a potential resiliency factor in reaction to trauma (Thompson, Kaslow, Short & Wyckoff, 2002).

According to cognitive theory, people guide their choices by their beliefs about their ability to control outcomes. "Perceived self-efficacy refers to beliefs in one's capabilities to organize and execute courses of action required to produce given attainments" (Bandura, 1997, p. 3). Self-efficacy is a merging of self-esteem with a belief that one can influence his or her environment (agency), and encompasses concepts such as learned-helplessness, victim-stance and confidence. Basically, the theory holds that when a person becomes a victim, perceived ability to successfully handle the crisis (self-efficacy) will play a major role in their thoughts, emotions and behaviours. Note that actual power is not important; rather it is the person's internal cognitive perception that influences coping choices. Recall that it is also the belief that others will support one or that the police are investigating a crime that benefits victims, not whether these assumption are correct (Norris et al., 1997). Thus, cognitive elements (i.e., beliefs) play a major role in mediating the effect of victimization and the application of coping responses.

People with high self-efficacy tend to believe they will be able to successfully handle specific crises. That is, over a series of success experiences they have learned certain behaviours that often result in success. A person may have high self-efficacy in one area (e.g., physical skills) but low in another (e.g., arithmetic ability). Self-efficacy becomes important in victims, if the victim feels that they can or cannot successfully cope with the crisis. The role of self-efficacy in victimization may be best explained with an example. A chronically abused victim of domestic violence may choose not to leave an abusive partner because of a belief that they cannot effect change in their life. Adult survivors of child abuse may be more likely to display a learned helplessness style wherein they believe they cannot change their circumstances (low self-efficacy). This possibly results in their not trying to change the outcome of potentially dangerous situations. In contrast, Thompson et al. (2002) noted that high levels of self-efficacy among abused women might enhance their perceived ability to obtain important social and material resources. This would thereby increase the likelihood they would leave an abusive relationship. In a sense, self-efficacy refers to the person's self-perception of being able to generate feasible options. It is interesting to note that many clinical interventions include elements that require the victim to confront and successfully deal with difficult memories and emotions or learn and practice new skills (Nishith et al., 2002; Resick et al., 2002).

Self-efficacy may also explain coping choices. Bandura (1997) indicated that self-efficacy is central to behaviour change and coping because perceptions of efficacy influence the use, intensity, and duration of coping behaviours. Thus, self-efficacy is held as the underlying personality structure that influences coping choices. As stated above, self-efficacy develops out of previous success experiences and is part of the victims learning history. Together learning and self-efficacy will have a major impact on what specific coping skills the victim will feel he or she can employ with success. Thus, if learning has shown that dissociation is the best coping strategy, then it increases the likelihood of it being employed in new situations, especially if other strategies have failed. On the other hand, if the person has had success in receiving support form others, they are more likely to employ that strategy. Again, clinical interventions appear to incorporate these ideas in program development (Nishith et al., 2002; Resick et al., 2002).

It is interesting to note that the more likely the victim was to receive positive support from family and friends, the more likely he or she would be to access professional support (Norris et al., 1997). One possible explanation for this relationship is related to self-efficacy and personality development: attachment style. Briefly, attachment reflects our early experiences and expectations with regard to caretakers and our expectations about whether the caretaker is emotionally available in stressful situations. These early patterns direct how we will deal with stress and interpersonal relationships in our adult life. Thus, a person with high self-efficacy around being able to successfully manoeuvre the complexities of human relationships will tend to excel in social relations. Researchers have examined how attachment style affects coping choices in people dealing with stress and trauma.

Mikulincer et al. (1993) examined these interpersonal working models in Israeli students two weeks after the end of the Gulf War. They found that people with a secure attachment style used relatively more support-seeking strategies in coping with trauma. Thus, it makes sense that they may make use of both natural and professional supports. In infanthood, secure infants do not become overly distressed in the absence of their caretaker, typically showing confidence in the return of the caretaker and thereby more confidence. Basically, they have learned this through repeated exposure that the caretaker will return. Armed with the resulting high self-efficacy in this arena, they are more willing to seek help and more likely to expect that the help will be both available and helpful (Bandura, 1997).

In contrast, ambivalent people under stressful conditions used more emotion-focused strategies and showed greater emotional distress (anxiety, depression, hostility, and physical symptoms/somatization) and war related intrusive thoughts in response to threat (Mikulincer et al., 1993). In infancy, these people tend to show great distress in the absence of the caretaker and exhibit difficulty being soothed. Avoidant infants also display initial distress at abandonment but eventually become resigned to the absence. They have learned that they cannot control their social world (low social efficacy). Those students classified as having an avoidant attachment style used more distancing strategies such as denying or minimizing their internal distress. These individuals learned that they could not rely on their social environment, but instead focus on their own need to show strength. Thus, Mikulincer et al. (1993) found that avoidant individuals showed greater physical symptoms/somatization and angry outbursts and denied that it had any relationship to trauma. The stress manifested in other ways even though they self-reported no adverse stress reaction. These results indicate that the secure individual is the most likely to seek help, possible because of an increased likelihood of anticipating that such help will result in reduced distress. The other two groups may not have such an expectation.

This research finding differs somewhat from the research on ruminators (Nolen-Hoeksema & Davis, 1999). Recall that ruminators often sought out and benefited from social support, but often found the support was unsatisfying or limited. It is likely that ruminators and those with ambivalent attachments share some common characteristics. One commonality may be the focus on subjective, distress reaction. Thus, an ambivalently attached person and the ruminator may seek out help but focus on their emotional elements of their distress. The support person may make attempts to sooth the victim, but it does not work. This leaves the ruminator or ambivalently attached person feeling unheard and increases his or her distress. In effect, these individuals may be searching for emotional support and finding that others are unable or unwilling to provide the level of support they feel they require. In contrast, when the securely attached person seeks out social support, they may be more effective at identifying support and using it to cope with their trauma, rather than focusing solely on their distress. This linking of the research should be investigated empirically, but it fits the data of the two studies.

Personality variables seem to permeate all aspects of the victimization and recovery process. However, other research findings are worthy of note. Specifically, demographic factors are important to the extent that they help identify certain common elements in victim profiles and reactions. Although generally not open to intervention, they provide useful information to how crime affects people differently. These issues will be briefly reviewed in the following section.

Demographic characteristics

Demographic variables have an uneven relationship with victimization and trauma. Recall that Norris et al. (1997) found that demographic variables did not predict self-reported distress. However, Greenberg and Ruback (1992) found that women were more likely to report fear. Brewin et al. (2000) noted that some studies report that women are more likely to develop PTSD than men, while others do not. They attribute this discrepancy to differences in sampling; in community samples, the gender difference exists, but disappears when dealing with military samples. On a positive note, Leymann and Lindell (1992) found that women reported receiving more positive social support, which we know can be very helpful in alleviating distress.

Age is also examined as related to crime related trauma. Recall that much research has noted the negative effects of childhood sexual abuse (Byrne et al., 1999; Messman & Long, 1996). Studies have also identified a relatively consistent finding that older adults report more crime related fear, regardless of victim status (Weinrath (2000). In a study examining differential effects of sexual assault related trauma, Wilmsen Thornhill and Thornhill (1991) found that women of childbearing age experience a more severe trauma reaction in response to vaginal sexual assault than do women outside childbearing years (either pre-adolescent and post-menopausal). They indicated that all groups report trauma symptoms in response to sexual assault, but that non-child-bearing women show equivalent trauma reactions regardless of the nature of the sexual assault. Women of childbearing age showed increased trauma in cases of vaginal sexual assault and if semen was present. They argued from an evolutionary perspective and noted that the trauma of the sexual assault is compounded by the addition of loosing one's reproductive choice over partner (Wilmsen Thornhill & Thornhill, 1991).

One study around race is particularly relevant to the Canadian context. Weinrath (2000) examined differences regarding fear of crime between Canadian Aboriginals and the general population using census/survey data. His sample sizes were quite impressive, with over 18,000 Aboriginal people surveyed and over 10,000 Canadians. In comparing Aboriginal Canadians to Non-Aboriginal Canadians, he found higher rates of violent victimization among Aboriginal Canadians, but not differences in fear ratings (Weinrath, 2000). He postulated that part of the reason for this discrepancy is that Aboriginal Canadians have particularly stressful lives and that fear of crime does not rate as a high priority. However, in discussing sexual assault, Calhoun and Atkeson (1991) indicate that culture may influence access to personal attitudes, social support, and other characteristics that my delay recovery.

Thus, demographic variables do offer some interesting avenues; however, it does seem to be specific personality, support and crime characteristics that have the major influence on trauma reaction. These internal attitudes and beliefs, in combination with signs of distress, will likely mediate how a victim copes with their trauma and whether they seek help. It is to help-seeking that the discussion turns, focusing on how people can differ on their willingness to participate in active interventions, such as

treatment. Treatment readiness and matching clients to specific intervention techniques may be a productive avenue of service delivery.

2.7 Matching clients to interventions: Treatment Readiness

One possible model that could be applied to understanding how victims might greet interventions is the Transtheoretical Model of Change (TMC) (Prochaska, DiClemente & Norcross, 1992). The TMC is so called because these researchers wanted to examine how people change their behaviour independent of any particular theoretical model. Thus, they examined self-changers and those in more formal interventions to identify common strategies and approaches and developed the TMC. Simply put, the TMC holds that people cycle through different psychological and behavioural processes when faced with change. The model and associated research may have implications for victims and their supports in helping to target specific thinking and behavioural actions that increase the likelihood of successfully coping. The TMC postulates five stages of readiness with respect to change: precontemplation, contemplation, preparation, action and maintenance.

In the precontemplation stage the person has no intention to change behaviour or address problems. Generally, this research has focused on those who do not see making any change in the foreseeable future (Prochaska et al., 1992). Individuals primarily in the precontemplation stage are often unaware of the problem or deny the extent or severity of the problem. Often, these people come to therapy because others have pressured them to seek help. As Prochaska et al. (1992) indicated, these individuals might want to change but do not truly intend to make a serious effort in the near future. In crime victims, this pattern could be hypothesized in the victim who denies problems or trauma associated symptoms but loved-ones have noticed marked changes in temperament, behaviour or overall health. The avoidant people described above would tend to fall into this group (Mikulincer et al., 1993).

People in the contemplation stage are aware of their problem and are seriously considering making a change. However, they have not made a commitment to take action. Often these people spend much time examining the pros and cons of the problem and the solution to the problem. They often seem to struggle with their positive evaluations of the status quo and the amount of effort, energy, and loss it will cost to overcome the problem. In victims, this might manifest in their acknowledging the problem and their need for help, but also focus on issues of shame, fear of telling someone, fear of reactions, fear that talking about it might make things worse. This ambivalence can freeze them into inaction, despite recognition of the negative effects of not doing anything.

Prochaska et al. (1992) also described a typically short stage named the preparation stage. People in this stage recognize the problem and intend to do something in a very brief time. In examining habit change, these individuals have often tried to make changes in the past year, but have failed to make lasting changes (Prochaska et al., 1992). In victims seeking treatment, this might be the person who has made some changes on his or her own and is awaiting an appointment or has tried therapy in the past but stopped before resolving all his or her issues.

In the action stage, people are actively trying to make changes to their behaviour, thoughts/feelings, or environment in order to address their problems. This stage requires greater commitment from the person and is the focus of change activities. Often this is what most others (family, spouse, therapist) recognize as “change”. Prochaska et al. (1992) indicated that this false linking between action and the

change process ignores the work required to get to this point. Further, they point out that this emphasis on action also ignores the work needed to maintain changes. Another element to the action stage is reaching a specific goal. For example, a victim experiencing PTSD may choose a reduction in specific symptoms, but successful treatment rises to success with the extinguishing of negative symptoms to the pre-trauma levels.

Finally, people in the maintenance stage work to prevent relapse and reinforce the gains made during the action stage (Prochaska et al., 1992). Maintenance is not a static stage, but the continuation of the change process. Thus, people may need to maintain themselves for a short time or maintain certain actions or habits throughout their lifetime. Clinically, for victims who typically repressed negative symptoms, this might mean talking to natural supports about daily stressors rather than letting things build to pathological levels. Further, given that past victimization places the person at risk for future victimization, maintenance may need to incorporate positive behaviours that break this cycle.

It is important to note that Prochaska et al. (1992) did not see this as a developmental model that, once finished, never needs to be revisited. In fact, a person initiating change may exist at all stages simultaneously, depending on the particular symptom or issue. Thus, a victim may recognize they have a problem resulting from victimization and may seek out medication to help deal with depression or anxiety. This behaviour is consistent with action. However, this same person may refuse to enter any type of psychotherapy or group work and indicate that they do not need to talk about their problem. This would be more indicative of the precontemplative stage or, perhaps, contemplative. Further, this same person may take the medications briefly and then discontinue because of side effects. This would move them back into contemplative or preparation stage depending on what they choose to do next. It is the dynamic nature of the TMC that makes it particularly attractive to clinicians.

Under the TMC, classical resistance to therapy is cast in a different light as a mismatch between stage and intervention. Clinicians, paraprofessionals and others typically create programs focused solely on the motivated and "ready" client. Self-help programs and books also target this group. This "action" bias results in many people failing at making successful changes. Unfortunately, these failure experiences become internalized, potentially decreasing the likelihood of future change attempts. In describing smoking cessation, Prochaska et al. (1992) noted that about 50%-60% of smokers are in the precontemplation stage, 30%-40% are thinking about quitting (contemplation stage) and only 10%-15% are ready to quit (preparation/action).

Clinically, these stages have implications for therapy. One activity for moving people out of contemplation into the next stages is to employ a formal or informal decisional balance exercise (Prochaska et al., 1994). Through the use of a grid system, the person is able to concretely examine anticipated gains (benefits) and the anticipated losses (costs). In examining twelve different samples of people trying to change various behaviours, Prochaska et al. (1994) found that for all samples, Precontemplators emphasized the cons of changing the problem behaviours. They also found that in eleven samples those in the action stage emphasized the pros of changing (the one exception were those with cocaine addiction). In seven of the samples the crossover between the pros and cons of the problem behaviour occurred during the contemplation stage (exercise acquisition changes in the preparation stage; delinquent behaviours, sunscreen use, high-fat diets, and mammography screening changed in the action stage and may have occurred during the preparation stage).

Of note, Rosen (2000) reported that 70% of the between stage variance in cognitive-affective processes occurred in the contrast between precontemplation and all other stages. These cognitive-affective processes of change include: gathering information (consciousness-raising), reconsidering consequences on oneself (self-reevaluation), experiencing and expressing emotions (dramatic relief), considering consequences on others (environmental reevaluation), and attending to changing social norms (social liberation). These results have profound implications for crime victims and help-seeking behaviour, as it may be those who feel they have no problems related to the crime that need to be identified and screened. That is, the biggest change step is deciding they need help.

With respect to behavioural processes, Rosen reported that 50% of the between-stage variance for behavioural processes was between precontemplation and all other stages. Behavioural processes include: substituting new behaviours (counter-conditioning), controlling environmental cues (stimulus control), being rewarded by self or others (reinforcement management), using social support (helping relationships), and committing to change (self-liberation). In reviewing these actions, one can understand how the TMC came out of a clinical literature focused on changing health behaviours and substance use disorders. Rosen (2000) reported that clients in psychotherapy, as opposed to therapy focused on specific behaviours, were more likely to show between stage variation in use of consciousness-raising, self-reevaluation, and use of a helping relationship. Generally, use of behavioural processes within psychotherapy tended to be weaker, however, none of the psychotherapies examined involved behaviourally oriented treatments. Rosen (2000) warned against seeing the TMC as a panacea to understanding change in treatment, specifically noting that it does not easily fit into the psychotherapy model.

The importance of this concept may be illustrated through an example. Recall the research examining attachment style (Mikulincer et al., 1993); in this case the avoidant victim would be seen as being precontemplative. He or she does not admit to trauma related symptoms; he or she shows higher levels of physical symptoms/somatization and anger. It is likely that loved-ones witnessing these reactions would notice the distress and pressure the victim to seek help. However, if met with the typical action-oriented interventions, the victims would shutdown, get very little from treatment and likely drop out. However, based upon the TMC research, the victims may be better met with interventions focused on education regarding different reaction to crime (consciousness-raising) or looking at how he/she has changed since the crime (self-reevaluation) and how that has affected family and friends (environmental reevaluation). Rather than the direct challenge of his/her stance that the crime did not bother him/her, he/she is given an opportunity to learn how it could have affected them. This eases them into examining their reaction, and allows him/her to better decide what he/she needs to do to improve functioning. This remains theoretical and I will now discuss the research applying the TMC to victims.

Unfortunately, there is little research on the application of the TMC to victims of crime. One study applied the TMC to therapy with adult survivors of childhood sexual abuse (Koraleski & Larson, 1997). Out of 83 survivors in therapy for sexual abuse they identified 38 (45.8%) as being in the contemplation stage, 7 (8.4%) as in the preparation stage, and 26 (31.3%) as in the action stage. Consistent with the model, they found that clients in the action-stage used behavioural processes of change more than those in the contemplation stage. They indicate that survivors use cognitive-affective processes earlier in therapy and then move to greater use of behavioural processes, pointing

out that this parallels the sequence of issues discussed in clinical descriptions of sexual abuse therapy (Koraleski & Larson, 1997).

However, Koraleski and Larson (1997) did not find that victims in the contemplative stage were more likely to use cognitive-affective methods. The TMC posits that these processes are more frequently used in the early stages and are used less frequently as the person moves to action. Contrary to this, psychotherapy clients tend to use these strategies throughout the stages and may be necessary in traditional psychotherapy (Koraleski & Larson, 1997). From a clinical perspective this makes sense. When focusing on one habit or problem area, the person is able to target change activities, however, as problems become more multi-faceted and complex, the person may need to revisit many areas of beliefs and emotions in order to address the problem. Thus, general psychotherapy, with its more global focus, may result in a person being in action stage on some issues, in precontemplation on others and so on with each stage. In fact, it could be argued that therapy is a process of initially helping the clients address self-identified problems and then addressing other problem areas as they come to light through the therapeutic process.

Along the line of applicability of the TMC model to victims of crime, one other area needs to be reviewed. Traditionally, the goal of therapy, as held by the TMC, is the extinguishing of the problem behaviour (e.g., smoking cessation, eating poorly, etc.). However, in dealing with the psychological after-effects of crime, this may be an unrealistic goal. In other words, the goal may not be extinguishing behaviour, but rather reducing the distress caused from the crime. It may be more important to look at the TMC model to define new outcome data (Morera, Johnson, Parsons, Warnecke, Freels, Crittenden & Flay, 1998).

Based on the research above, moving from precontemplation to contemplation is a major step. Smith, Subich and Kalodner (1995) found that those clients who prematurely terminate therapy are more likely to be in the precontemplation stage. These clients tend to report less therapeutic progress, experience more psychological distress and rarely reach their goals. At a logistical level, they tend to miss appointments, sit on waiting lists and take up clinician time. Under the TMC, this behaviour is understandable in that the mismatch between action-stage oriented interventions with people who do not recognize they have a problem. Helping precontemplators move out of this holding pattern may both improve their lives and improve the efficacy of interventions by increasing motivation and decreasing so-called resistance. Thus, interventions that focus on helping victims decide they have a problem may be very useful in service-delivery. Researchers have found that TMC measures have excellent stability and high levels of reliability (Madera et al., 1998). They note that TMC measures appears to have applicability as an outcome measure to examine whether change efforts are helpful in moving a person through the stages more effectively.

2.8 Conclusion of the Literature Review

In conclusion, it is apparent that victims do experience cognitive, emotional and behaviour changes as a function of being victimized. Previctimization characteristics, crime-specific characteristics, reaction of supports, coping strategies, differences in personality variables and use of interventions all intertwine. The preceding review attempted to fill the wide gaps in the literature on cognitive changes in crime victims by amalgamating very disparate research areas. Thus, much of what has been discussed needs to be seen as a starting point in this area.

Given the preceding discussion, one can make some general conclusions by linking this research with clinical understanding. The next three sections focus on further integrating the literature review by focusing on the implications of this literature. The primary focus of this integration will be to identify salient clinical issues. However, the third section focuses on general recommendations regarding how to improve the literature to further support victim initiatives and clinical practice.

3.0 Implications for Victims

The main focus of research in victimization is to improve victim services and, thereby, reduce the trauma associated with victimization. Given the above discussion, one can note much research that tracks how victimization and subsequent coping affect the individual. Borrowing the model of Casarez-Levison (1992), I am going to organize this section developmentally and locate important cognitive, emotional, coping and intervention issues within each stage. This approach should help integrate the above literature and help service-deliverers identify salient issues for clinical interest.

Previctimzation/Organization.

Recall that this stage focused on the previctimization adaptation level of the person (Casarez-Levison, 1992). Here clinicians will want to gather a relatively comprehensive history. The following elements should be included:

- History of childhood physical and sexual abuse (Messman & Long, 1996; Nishith et al., 2000)
- History of previous PTSD (Brunet et al., 2001)
- Severity of previous PTSD episode(s) (Brunet et al., 2001)
- History of previous crime victimization or trauma (Ozer et al., 2003)
- Psychiatric history, especially depression (Ozer et al., 2003)
- Family history of psychiatric problems (Ozer et al., 2003)
- Personality characteristics (Davis et al., 1998; Nolen-Hoeksema & Davis, 1999; Thompson et al., 2002).
- Coping history (Dempsey, 2002; Everly et al., 2000; Harvey & Bryant, 2002).
- Interpersonal relationship history (Kliewer et al., 2001; Mikulincer et al., 1993; Nelson et al., 2002).

Victimization/Disorganization.

Recall that this stage focuses on the crime, and the first few hours or days following the crime (Casarez-Levison, 1992). Victims and their caregivers need to be aware of the following:

- Crime characteristics, especially severity, have a profound effect on trauma (Gilboa-Schechtman & Foa, 2001; Norris et al., 1997; Ozer et al., 2003).
- Victim characteristics such as gender, age, history, etc. (Brewin et al., 2000, Greenberg & Ruback, 1992; Wilmsen Thornhill & Thornhill, 1991; Weinrath, 2000).
- Caution regarding secondary victimization by the system (Campbell et al., 1999; Hagemann, 1992; Norris et al., 1997).
- Dissociation during or immediately following the crime is the strongest predictor of PTSD (Ozer et al., 2003).
- Initial dissociation (shock) may be adaptive in some cases in that it may interfere with encoding into the long-term memory.
- There may be a narrowing of attention (Holman & Silver, 1998).

- Need for social support (emotional, informational, appraisal and instrumental)
- Information aimed at helping the victim make decisions
- Information about resources and common reactions
- Emotional reactions need to be experienced and processed
- Initial assessment of coping mechanisms being applied
- Critical Incident Stress Management may be useful, especially for victims seeking information (Greenberg & Ruback, 1992; Hagemann, 1992).
- Other crisis intervention models may be useful in helping the victim overcome the initial challenges of surviving a crime (Calhoun & Atkeson, 1991).

Transition/ Protection

Recall that this stage focused on how the person begins to adjust to the victimization and its implications (Casarez-Levison, 1992). Clinicians are more likely to be actively involved with victims as they move through this stage.

- Natural and professional supports could be accessed (Casarez-Levison, 1992).
- May apply the Transtheoretical Model of Change to help identify what level of service is needed (Prochaska, DiClemente & Norcross, 1992).
- Dissociation may indicate later difficulties (Ozer et al. 2003).
- There may be active blocking of memories (Thompson, 2000).
- Victims may avoid crime related reminder, either through drugs/alcohol or active avoidance (Everly et al., 2000; Hagemann, 1992; Mezy, 1988; Wolkenstein & Sterman, 1998).
- Victims may engage in safety oriented behaviours (Hagemann, 1992)
- Victim may be focused on meaning-making (Gorman, 2001; Layne et al., 2001; Nolen-Hoeksema & Davis, 1999; Thompson, 2000).
- Social comparison is often used to understand victimization (Hagemann, 1992; Greenberg & Ruback, 1992; Thompson, 2000).
- Victims may engage in self-comparison activities, focused on pre/post victimization changes (McFarland & Alvaro, 2000).
- Active treatment may be initiated (Casarez-Levison, 1992).
- Victims need to be informed that entering treatment may mean getting worse before getting better (Nishith et al, 2002).
- Treatments including an exposure element seem to be effective (Nishith et al., 2002).
- Self-efficacy may be important in treatment programs (Thompson et al., 2002).
- Emotionally engaged clients recover faster (Gilboa-Schechtman & Foa, 2001).

Reorganization/Resolution

Recall that this stage focused on a reintegration of the person into a stable functioning individual (Casarez-Levison, 1992). Victims need to understand the following:

- Recovery does not mean returning to a pre-victimized state (Hagemann, 1992).
- Transtheoretical Model of Change may apply in maintaining new behaviours.
- Victims may focus on how surviving indicates strength (Hagemann, 1992; Thompson, 2000).
- Remaining negative coping strategies need to be minimized (Dempsey, 2002).
- Activism is a possible long-term outcome of victimization (Hagemann, 1992).

In trying to gain increased understanding of victim subjective experience, it is useful to examine victimization as a process. In a sense, victimization is a developmental process where an individual must adjust to an external stressor. As the victim moves from the criminal event to subsequent recovery and reintegration, they are faced with different challenges. Their cognitive skills will be challenged and changed as part of this process and the preceding review has discussed some of these changes. However, one must remain mindful of the fact that each victim is an individual and the specific challenges will change because of these differences.

3.1 Heterogeneity of Victims: Need for a Services Continuum

In examining workplace violence, Barling, Rogers & Kelloway (2000) noted that people experience the same events differently. In their research, they found that the fear of reoccurrence of traumatic event could affect the person's mood. The above review covered issues such as severity of crime, severity of response, use of threat, use of weapon, as elements of the process of victimization that can affect outcome. This finding among workplace violence can be generalized into understanding that all crime victims will have very unique responses to the crime event. Thus, interventions need to be adaptive to these individual differences.

Individual differences may be seen as the major reason for individual intervention. The unique experience of some individuals makes individual focus an integral part of treatment. However, there are also commonalities in the victim experiences that all victims will experience to a greater or lesser degree. These may include feelings of fear or anger or psychological/behavioural avoidance. However, victims should not be lumped together as the effects could be harmful. For example, social comparison would mean that mixing severity levels would likely be harmful to victims of more severe crime (Greenberg & Ruback, 1992). These victims may get caught in a cycle of depression, victim-stance or self-blame when comparing their experience with less traumatized victims. This argues for some form of continuum of services that might help move victims closer to a state of health.

Many victims may benefit from minimal services such as information sharing, written literature, knowledge of available supports, and education regarding possible signs and symptoms of deeper problems. In fact, it is this group that may benefit from CISM interventions, with its focus on information-sharing and resource linking (Everly et al., 2000). These victims likely rely on natural supports or their own unique coping strategies to cope with their victimization. In other words, they are able to cope with their new status as victim. This group is likely made up of those who experienced relative non-traumatic victimization or who have particular resiliency in coping with situational and chronic stressors.

A second group could be labelled moderately traumatized. These victims may experience some symptoms, such as fear or anger, but learn to deal with it with minimal professional support. They may benefit from the same interventions as the lower traumatized group, but may also benefit from support groups, individual intervention or other group intervention. This may be relatively short-term intervention focused on specific negative symptom and targeting specific skills training. This group may also rely on natural supports, but may require the support of paraprofessionals and professionals.

The highly traumatized group could also benefit from all the above services, but will often need more intensive intervention. This may include long term therapy to deal with symptoms and building coping skills. Treatment would likely need to address previous trauma and long-term effects of victimization.

The focus on symptoms would also need more time to generalize to other aspects of life. It is likely that the severely traumatized victim will be at increased risk of very negative symptoms. Furthermore, if these victims have multiple problem areas and pre-victim problems, it is sensible to place professional resources at the disposal of this group. Professionals should be better equipped to deal with idiosyncratic reactions and act as a resource to paraprofessionals and volunteers.

One final group that needs to have specific interventions are those that we might call precontemplators: those who have experienced a trauma, are experiencing negative reactions but refuse to acknowledge either the reaction as related to the trauma or minimize the scope of the reaction. These clients need specific intervention to help them understand victimization and how to recognize when to ask for help. Often with precontemplators, consciousness-raising techniques through written materials (pamphlets), opportunity for self-reevaluation or dramatic relief through information sessions, or other less confrontational means should be helpful in allowing this group to make an informed assessment of their present functioning and possible choices (Rosen, 2000). However, it is important to recall the warning of Nelson et al. (2002) that clinicians should not assume that people who have experienced a potentially traumatic event would automatically be traumatized. Thus, service-deliverers need to handle these situations in a sensitive manner to prevent further distress.

4.0 Implications for Professionals

The implications of the preceding review are quite broad-based and not at all consistent. That cognitive changes occur is a reasonable conclusion, but how this affects what professional do is another matter altogether. Clinically, victims represent a diverse group that has been lumped together through an external, non- controllable process. Thus, service-deliverers need to approach this group quite differently. They must take measures not to assume any specific commonality, including trauma. Instead service-deliverers need to accurately assess victims and recommend appropriate interventions. Furthermore, this challenging work means that service-deliverers must attend closely to self-care and the risk of vicarious traumatization and burnout.

4.1 Assessment and screening

One of the more important functions of a service delivery model is the identification of client need and linking clients to services. The following issues need to be a part of client assessment and used to direct clients to appropriate services. It is important to note that these areas of investigation need to be linked to clinical judgement and not seen as a simple screening checklist.

Victim Characteristics: History

- Previous victimization (Childhood physical/sexual/emotional abuse)
- Previous victimization (other)
- Personal psychiatric history
- Family psychiatric history
- Previous PTSD, including severity
- Coping skills used in the past

Victim Characteristics: Current

- Personality Characteristics
- Rating of self-efficacy and ego strength
- Demographics
- Current coping strategies
- Use of alcohol/drugs
- Suicidality/Homicidality assessment
- Current mental status: Psychological disorders etc.
- Presence of dissociation
- Current Support network
- Primary location in the Transtheoretical Model
- Victim's perception of what he or she needs

Crime-related Characteristics

- Specifics of the criminal event
- Severity of the crime
- Use of credible threat
- Use of weapon

- Single incident or chronic victimization
- Victim-perpetrator contact
- Known perpetrator
- Reaction of support system
- Reaction of professionals (Secondary victimization)
- Extreme emotional or dissociative reaction to criminal event

As a victim shows increased distress and symptoms, they need to access either more, or more intensive, services. Thus, a victim who is not having a severe reaction may not nee to join a support group or receive individual therapy. However, they might benefit from information sessions or written literature. It is this matching of clients to a service within a continuum that will benefit the most clients, while remaining cost-effective.

4.2 Client matching and continuum of services

In discussing the matching of clients to service and continuum of services needed, recall the discussion of heterogeneity of victims. Given the wide variation of clients and client reactions, service-deliverers need to focus on delivering focused interventions to particular client. Basically, services need to range from information sharing to intensive individual therapy. This could include public education, pamphlets, information sessions, support groups, peer counselling, paraprofessional support, clinical support and psychological interventions. Furthermore, these interventions need not only target the primary victim, but also the victim's support network and society as a whole. This is especially true of education efforts, as it is reasonable to assume that initiatives such as public education and information sharing will help new victims assess the system faster and, perhaps, avoid the distress associated with searching for resources.

Education of Victim

At minimum, victims need access to education around the process of coping with trauma. Pamphlets recommending easy, positive coping strategies need to be widely available, including how to seek more help. Victims may also benefit from a primer on the criminal justice process, possible outcomes and the professionals involved with their case and their respective roles. This may help alleviate some to the secondary victimization some victims report in dealing with the "system". Further, victims need to clearly understand the goals and processes of therapy to make an informed choice on what treatment option is best for them. These issues should be covered in pamphlet, booklet and information seminars for victims and support people. These initiatives may also help precontemplators to understand their reactions and encourage them to seek help.

Education of Support System

Natural supports need to be educated on how to provide emotional, informational and appraisal support. These support people need to better understand the traumatization process and likely reactions. They also act as the first line of monitoring the victim's distress and need to understand the warning signs to get the victim help if he/she deteriorates. They also need to understand how they might react to their friend or partner's victimization and how to seek help for their reaction (e.g., a husband having difficulty with his wife's sexual assault). A basic pamphlet that introduces these concepts for loved-ones should be made available to all victims and supports. Some supports may also be able to attend information sessions.

Despite efforts in the area of criminal justice personnel, more work can be done to educate this group on effectively handling victims. Research has indicated that these groups can be important sources of information and also offer tangible support (Norris et al., 1997). Education and training around avoiding secondary traumatization and burnout may also be beneficial to this group. Similarly, medical personnel and mental health workers education efforts is warranted. This might not only be for clients dealing with victimization, but also for those clients coping with other problems or who have a history of victimization and trauma.
Education in this area should not only focus on helping identified victims, but also on developing appropriate screening questions to uncover hidden victims. The research is clear that minimal group intervention (e.g., four group sessions) can alleviate much distress.

Peer Support groups

Research indicates that victims pay more attention to co-victims than innocent bystanders (Greenberg & Ruback, 1992). Similarly, we know that not all victims require professional intervention, especially if their reaction is minor. Thus, support of peer programs makes sense as a cost-effective way for these victims to work towards recovery. It is recommended that such programs be linked, in some way, to professional supports. The goal is not supervision, but to allow quick access for victims who need more intensive services or interventions. These programs can also work as a final step out of the victims system, helping victims to consolidate gains already made.

Professional Support groups

Professionally led support groups may be important for more severely traumatized clients. This could include those clients that would have difficulty in more active treatment programs but, instead, need some time to build the strength to enter these programs. Such clients would be inappropriate for peer support program alone, as the problems would likely be beyond the skills of group leaders. However, professionally lead support programs could help the victim move forward to make positive change.

Therapy

Finally, both individual and group therapy lead by accredited professionals should be supported for those victims experiencing severe trauma reactions. Importantly, relatively brief intervention may be beneficial to clients, so this option need not be expensive. Professionals offer specific skills in identifying and intervening in trauma-related symptoms. They should be better able to allow the victim to tell his or her story and help make sense of that story. Further, they can individually tailor interventions in group and individual treatment to help the victim move more quickly through the recovery process. This should help alleviate both the personal suffering and help the person regain normal functioning.

Use of Paraprofessionals

One issue of importance in examining victims, and the interventions that might be helpful, is the use of paraprofessionals in victims' service. Paraprofessionals are an important part of the continuum of services needed for victims. Recall that perceived and actual social support have a major beneficial impact on victims. Paraprofessionals, with reasonable training, are able to fill this gap and help victims with problematic reactions and to understand their reactions. Professionals, on the other hand,

can be useful for those clients who require more intensive help. Although not all victims need professional services, there can be a great benefit in providing this service.

In order to develop a competent and responsive continuum of services, there is a need for clear screening and training regarding when it is necessary to bring professionals into service delivery. However, if such a system were put in place, victims would be able to access a more efficient system and quickly be matched with the appropriate level of service. This would be cost-effective for the system and more beneficial to the client who should be able to access services faster, rather than deal with long waitlist or overworked professionals. On the theme of overworked professionals, the issue of vicarious traumatization and burnout is also important when attempting to deliver effective victim services

4.3 Vicarious Traumatization and Burnout

A major consideration in providing services to crime victims is how to maintain the health of service providers. Gorman (2001) pointed out that service providers and supervisors must monitor secondary or vicarious traumatization, compassion fatigue, countertransference, and the risk of burnout. Brown and O'Brien (1998) examined job stress in battered women's shelters and how shelter workers coped with these stressors. They found that 65% of workers find the following as moderately to highly stressful: frustration when a battered woman returns to a dangerous home, anger at perpetrators and coping with the "pain and horror" of domestic violence. Emotional exhaustion/depersonalization was most related to time pressures. Other stressors linked with burnout were: red tape, physical demands, lack of participation, and lack of achievement (Brown & O'Brien, 1998). It is interesting to note that some of the stressors are related not to the victims but to politics within the system.
In their book on professional burnout, Grosch and Olsen (1994) made several recommendations to professionals to avoid burnout. These are discussed below.

Self-assessment

Professional, paraprofessionals and volunteers need to continually engage in a process of self-assessment. A major element of this involves distinguishing between normal fatigue and the exhaustion that is related to burnout. This also relates to supervision and consultation regarding how one is coping and engaging in self-care behaviours.

Interventions for Service-deliverers

Professionals and paraprofessionals also need to learn when to seek out help. Possible treatment options include self-help, support groups, psychotherapy, and outpatient/inpatient treatment (Grosch & Olsen, 1994).

Use of effective supervision/consultation/peer support

As noted above, service-deliverers need to rely on others as a barometer of their own stress level (Gorman, 2001; Grosch & Olsen, 1994). Perceived social support from supervisors and perceived social support from friends and family were both negatively correlated with emotional exhaustion and depersonalization (Brown & O'Brien, 1998). Thus, service-deliverers need to know they are supported and that others will provide them with clear feedback. It would be useful to include "burnout checks" as part of normal supervision or team discussions.

Building a balanced life

People in the helping professions need to learn to set boundaries and build a balanced life (Grosch & Olsen, 1994). This recommendation to avoid burnout is so pervasive, it could be defined as cliché. However, it is common because it is possibly one of the most important elements in training, development and maintenance of effective therapist/counsellors. Simply put, providers who become overly focused on work run the risk of meeting their own personal needs through providing help. These needs may be to feel useful, social contact, being valued, to address unresolved childhood or relationship issues. If, on the other hand, the provider is meeting these needs in other areas (e.g., home life, friendships, spirituality, etc.) they may be at less risk of burnout. The unfortunate element for those in the helping profession is the reinforcement peers, supervisors, and clients give to "dedication" or those on a "mission" to change things. The line between being the "hero" of the clinic and stress leave may be very fine.

Thus, professionals, paraprofessionals and volunteers working with victims need to remain ever vigilant that they, themselves, are not running the risk of becoming casualties of victimization. The above noted strategies are important when dealing with any client population, as it is easy to feel as though one needs to "give a little more". However, if service-delivers work consistently to this level, one day they will be unable to provide any support or intervention.

5.0 Gaps in the Literature

There are several areas of research that could benefit from more investigation or more rigorous investigation. The following listing does not focus on the need for specific research projects, but rather focuses on the gaps that exist that limit the current literature. This being said, much of the literature reviewed did not focus specifically on cognitive changes as a result of victimization, as there is not much literature on cognitive changes and victimization. Thus, the first recommendation focuses on that issue.

Cognitive changes in victims

As stated in the introduction, one of the challenges of the present review is that there is little empirical research in the area of cognitive changes in victimization. Fortunately, some extrapolation from related research areas can be generalized to this question, but this requires some tenuous leaps. Thus, this entire document needs to be seen as a first step in answering the question of cognitive changes. Thus, any empirically sound research that specifically examines victimization and memory changes, problem solving strategies, information processing, differences in thinking patterns and perceptual changes can only serve to move this area forward. It is understandable that researchers in this area focus on very applied research, but some research on these fundamentals may prove beneficial in helping victims. Once established, it would be useful to examine cognitive changes in different criminal victim sub-groups.

Longitudinal research

In completing the above research, any work that compares people before and after victimization can be of service. One problem with cross-sectional research or single measure research is that one is left unsure of why a relationship exists. However, longitudinal research allows researchers to examine changes after certain events as well as the effect of pre-victimization moderators (e. g., resilient and risk factors). In the current review, there were several longitudinal studies that provided useful information. Further longitudinal research would be useful to examine long-term effects of victimization and other factors related to trauma related to victimization.

Precrime status

Related to the need for longitudinal research, one of the major weaknesses of the victimization literature is that most research occurs after victimization. Thus, pre-victimization data is lost through the retrospective lens. Studies have attempted to assess precrime status via retrospective methods; however, this approach is less than rigorous and is open to bias (McFarland & Alvaro, 2000). It would be useful to complete follow-up analysis of already existing databases of non-victims to identify newly created victims on variables of interest. Research needs to examine how victim characteristic change as a result of victimization.

One method with several crime victim subtypes

Some of the difficulty in examining any literature is focusing on specific sub-groups. Researchers are more likely to examine sub-groups, such as sexual assault victims or victims of assault. This is understandable, however, it makes it difficult to compare reactions victim sub-types. The research by Norris et al. (1997) in Kentucky illustrates the benefits of examining a wide population base. These researchers showed that the process of victimization has a similar effect on all crime victims,

regardless of whether the person is a victim of property crime or violence (i.e., severity). In this research, they found that severity of the crime affected the magnitude of the reaction, not the profile of the reaction. This is important in understanding the victimization process. They were also able to show that victims of violent crime had a more severe reaction. This research should be replicated in a Canadian context with a longer follow-up period and more rigorous assessment methods. This would allow finer tuning of our understanding of victimization.

Common measures

Research on crime victimization could benefit from some standardization of assessment tools. This could be as minor as selecting one or two common measures of victimization and trauma that would be applicable to all victims. For example, within the field of family violence, the Conflict Tactics Scale is widely used and allows comparison across studies. The closest the general literature appears to have is a diagnosis of PTSD, but this is not specific to crime victimization and researchers use varied methods to assess this variable. With common measures, researchers could add any particular measures that are specific to a particular group or issue. This simple step would allow easier comparison across studies.

Application of Stages of Change to Victims Services

Research is needed on how the Stages of Changes manifests in victim groups and specific assessment on its utility in designing interventions or predicting therapy behaviour or dropout. Any research on the Transtheoretical Model of Change also needs to address personality and psychopathology variables in understanding why certain victims may not want to accept their victim status (precontemplation). Much work in this area is needed before assuming that the Transtheoretical Model can be successfully applied to victims

Matched comparison groups/Control groups

Victim groups need to be matched with comparison groups to understand the effect of victimization and any subsequent judicial or intervention process. Single-group designs are able to identify whether changes have occurred, however these changes may be normal developmental changes, due to societal changes or other extraneous changes. By using a comparison group one can have more confidence that a specific intervention is effective. For example, in examining secondary victimization, researchers could easily match police jurisdictions and provide specific training related to working with, and questioning, victims. Researchers could then contact victims to examine levels of secondary victimization between the two areas. Further, they could also match victims between these two sites to address any differences in the specific victimization variables.

Cognitive strategies in normal coping

Research is needed to examine whether there are differences in normal coping and coping with victimization. This review focused on crime victimization. However, in examining cognitive changes in coping with trauma, I applied literature based upon natural disasters or global issues. This may be an overgeneralization of that research in that there may be different effects when traumatizing act is under the control of another person (the perpetrator). Ozer et al. (2003) indicated that the relationship between trauma and PTSD was stronger if the traumatic event was a crime, as opposed to a natural disaster. This interpersonal aspect of criminal victimization is likely to add other elements to the trauma reaction. One would expect issues of trust, social fears, and feelings of personal safety may be differentially affected when trauma is due to other people. For example, the research findings on

attachment and trauma related to war (Mikulincer et al., 1993) would garner different results were the trauma caused by interpersonal crime.

Use of other report in efficacy research

Any research in victimization and changes in victims before and after victimization should include getting reports from significant others whenever possible. By including significant others to rate trauma response, researchers will be able to partially validate the victim's experience of change. Recall that victims and others differ on how much change they see in the victim before and after victimization (McFarland & Alvaro, 2000). This approach could be used in treatment efficacy and in applying the Stages of Change model to victims. Those victims in the precontemplation stage may not see themselves as having any difficulties associated with victimization, but others may note changes (Prochaska et al., 1992). This approach could be used in all stages or types of efficacy research to gain further information on changes associated with victimization and subsequent interventions.

Research on vicarious traumatization on natural supports

Although there has been work looking at burnout in professional supports, there is little work completed on looking at the natural support system. As noted above, natural supports seem to be preferred sources of support for most victims (Greenberg & Ruback, 1992; Leymann & Lindell, 1992; Norris et al., 1997). Thus, these sources end up being important to helping the victim, perhaps even allowing the victim to cope with their problem without accessing other services. That victimization has an effect on the victim's social network seems obvious. Nelson et al., (2002) reviewed the challenges of dealing with dually traumatized couples and indicated several problems associated with the clash of different coping strategies. However, the dynamics they described could be applied more easily to any relationship wherein one partner is victimized and the other is left helping him or her cope. Several research studies indicate that victimization has an effect on the victim's social system. For example, Byrne et al. (1999) found that victims of sexual assault were more likely to be divorced at the end of their study. This may be due to changes in the victim, changes in the spouse, or both. Research is needed in this area.

Research based on "Real World" victims

Although all "real world" research is plagued with problems of volunteers being different than non-volunteers and lack of randomization, there is an additional problem that research can address. In an effort to examine treatment efficacy, it is common practice to screen potential clients based on certain criteria. For example, Resick et al. (2002) excluded people with current psychosis, developmental disabilities, suicidal intent, current parasuicidal behaviour, current dependence on drugs or alcohol, and illiteracy as well as other factors. This "cherry picking" is useful for understanding if treatment is effective in the ideal case. However, research on treatment efficacy should also address the world of typical victim services and the normal cross-section of victims that may seek help. In other words, knowing that a particular intervention or treatment is effective in a certain, stable, subgroup may be important, but it may have little applicability to what type of programming may be effective in the field. Thus, research needs to also focus on applicability to real settings and victims.

Solid research on the applicability of crisis intervention and CISM to crime victims

As noted above, there is still debate over whether CISM is effective in minimizing the effects of trauma on victims. However, there is little debate over whether efforts to help victims are important. There is a need for solid, empirical research on the applicability of CISM and CISM principles on victims of crime. These methods may be more applicable with some victim groups than others.

However, the benefit of social support may mean that CISM, like other group interventions, can have a positive impact on all victims. A specific question that needs to be answered is whether dissociative-prone people are adversely affected by CISM.

Furthermore, given the beginnings of CISM in helping service deliverers, it would be useful to examine the utility of CISM in helping shelter workers, mental health worker, and criminal justice personnel in alleviating vicarious trauma. There appears to be some support for this application, but the evidence is not as firm as one would like.

6.0 Conclusions and Recommendations

In conclusion, it is apparent that victims undergo cognitive and emotional changes through the process of victimization. Research on treatment programs indicates that programs that focus on cognitive skills help victims reach a non-symptom status more quickly. However, other research shows that those who do not receive treatment may eventually catch up to treated groups. Thus, it is reasonable to assume that there are changes in cognitive elements and that the victim is faced with cognitive adjustment after victimization. Victims requiring services need to quickly access appropriate interventions to minimize the time they must cope with distress. However, clinicians must be mindful of the effects of crime victimization and take measures to respect victims and their wishes in a effort to minimize further distress. Matching clients to services could use severity as a guide, Critical Incident Stress Management may be useful initially and the Transtheoretical Model of Change may offer a way to direct victims to appropriate services. Unfortunately, much of this is conjecture as there is little research in the area. However, improvements in outcomes is a likely result if we better allocate resources to clients, matching service-deliverer, interventions and victims may help reduce the distress associated with victimization and intervention.

Despite the limitations of the literature in this area, certain recommendations can be made with relative confidence, especially if linked with a solid program evaluation element. Many of these interventions are cost-effective and could have profound impact on victim adjustment.

Recommendation 1: Improved research

As noted above, research initiative with victims need to move beyond simple relationships and examine the process of change associated with victimization. Through an examination of how victims change cognitively, emotionally, behaviourally and socially, researchers and clinicians will gain insight into how to develop more effective programming. This also means that an empirically solid research program needs to be supported by the system.

Recommendation 2: Treatment matching

Matching clients to services is a practical solution to restrictions in resources. Clients may graduate into and out of the system. The concern is that low-need clients are receiving too intensive an intervention, while high need clients are not receiving enough services. Research indicates that victims prefer and benefit from natural supports. Natural supports need to be seen as part of the continuum of treatment and that low need clients may benefit from minimal support and intervention, if they are taught to access these preferred support people. Similarly, high need clients would be able to access natural supports, while receiving more services to address their more severe symptoms and distress.

Recommendation 3: Development of a service continuum

As noted in Recommendation 2, client matching could be beneficial. This requires a system of service delivery that matches client needs. Thus, the system should range from minimal services (educational development, information sessions) to peer support/professional support to targeted interventions and therapy. The victim could then enter the system through any

means and quickly receive the level of service he or she requires. They could then move out of the system, reducing dependency and returning to their normal daily life.

Recommendation 4: Support of practical treatments

Treatment initiatives should include practical, daily living elements to address victimization. These initiatives could focus on coping skills, emotions management, economic issues, practical planning, or other issues. Ideally, these treatments would be linked to supporting research and include a program evaluation component. However, the focus of any victim intervention must be to return the person to a state of reintegration as soon as possible. This is beneficial to the victim and cost-effective to the system.

Recommendation 5: Prevention of future victimization

Given the consistent research finding that past victimization predicts future victimization, treatment initiatives should include training in avoiding future victimization. These interventions will likely need to focus on cognitive problem-solving skills building and improving appraisal skills. However, the potential positive effect of preventing future victimization should not be underestimated.

Recommendation 6: Support for Service-Deliverers/Natural Support

Although beyond the scope of the current review, the issue of vicarious victimization and burnout was raised to illustrate that the victimization process also affects service-deliverers. It is likely that service-deliverers and natural supports experience cognitive, emotional, behavioural and social effects of dealing with victims. The system needs to work to support these people through education, provision of resources and effective supportive supervision/consultation. Through these efforts, the system should work better for victims and continue to improve.

Recommendation 7: Public Education and Policy Review

As a preventative measure for future victims and to help supports to current victims, it would be useful to direct education and policy efforts to understanding the psychological effects of crime. Although it is understandable that crime victims get entangled in the medical and legal systems, it is very likely that minimal education and policy initiatives could help victims and supports track important psychological changes. Such efforts will help all concerned parties to quickly identify appropriate services. Further, victims and supports will be able to evaluate when such services are needed. This will not only alleviate distress but also reduce the strain on the professional support system as victims will truly access services they feel they require.

In conclusion, the process of victimization can have profound psychological effects on the victim, his or her support network and society in general. These internal, cognitive and emotional changes need not be permanent to have a negative effect. Fortunately, there are many avenues that can be used to help understand victims and to use this understanding to develop responsive treatment and education initiatives. This review and synthesis should be viewed as an early step because of the sparse research in the area of cognitive changes and treatment matching for victims. However, the greater research areas reviewed give the author optimism that with some solid research, the area could be improved dramatically.

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