

*Frozen In Time To Reclaiming One's Life:  
The Evaluation of the Ehlers and Clark Cognitive Therapy Model  
in the Assessment and Treatment of a Hijacking Survivor.*

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**Research report submitted towards the requirements  
of the Degree of Masters in Clinical Psychology  
2006**

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**Note:** The structure in which the data are documented and evaluated is based on the model conceptualised by Fishman (2005), and is in accordance with the layout prescribed by the journal of *Pragmatic Case Studies in Psychotherapy*.

## 1. Case Context

The rates of crime, particularly violent crime, in South Africa have reached epidemic proportions (South African Police Service, 2006). Not only have individuals been exposed to violence due to the injustice in South Africa's history, but the ever rising culture of violence continues to plunge traumatic events into everyday human experience. The study of trauma has been characterised by alternating periods of active investigation and periods of nothingness. Similar lines of investigation have been taken up and suddenly discarded, only to be rediscovered again and explored much later (Herman, 2001). However, these waxing and waning investigations into trauma are believed not to be the result of a lack of interest or the result of changing trends in academic quests. Rather, the study of trauma has provoked such an intense debate, that it intermittently becomes repugnant (Herman, 2001). To study trauma suggests that one must address the human vulnerability that characterises the human condition, as well as confront the distressing events that have resulted in one becoming traumatised.

Research on the effects of violent crime in South Africa provides support for the above mentioned phenomenon. One such study at a primary health care clinic in Khayelitsha investigated the rates of exposure to violence among Xhosa-speaking males and females aged 15 – 81 years (Carey, Stein, Zungu-Dirwayi, & Seedat, 2003). It was found that 94% of the participants had been exposed to at least one traumatic stressor in their lives. Consequently, large numbers of adults and children living in South Africa are affected by post-traumatic symptomology following exposure to a traumatic stressor.

Edwards (2005b) observes that significant advances in the development of treatments for Post-traumatic Stress Disorder (PTSD) have taken place within the last decade. However, questions regarding the transportability of these treatments to the South African context remain relatively unanswered. The transportability of a treatment model suggests that the model, which traditionally evolves in a research setting, may be successfully applied in a more clinical setting, may be transported from one cultural setting to another, and/or may be transported from a first world

setting to a third world setting. As such, research on the transportability of treatment models is an essential and distinctive area of research (Edwards, 2005b).

The present study presents the case of Mark, an English-speaking white South African hijacking survivor who had been severely disabled by PTSD for a period of two years. Every dimension of Mark's life had been affected by the violent hijacking he had been involved in. Several recent suicide attempts had been perceived as the only means of escaping the intense feelings of helplessness and worthlessness that had confronted him on a daily basis, resulting in the need for inpatient treatment in a psychiatric hospital. However, substantial improvement in Mark's mood and a significant reduction in post-traumatic symptoms was displayed within 8 weeks. This case provides the opportunity to evaluate the effectiveness of the Ehlers and Clark (2000) cognitive therapy model for the assessment and treatment of PTSD. The contextual factors central in this case are also documented as the Ehlers and Clark (2000) cognitive therapy model was developed abroad, thereby demonstrating that this cognitive therapy model is not only effective but is also suitable for the South African context.

## **2. Methodology**

### **2.1 Research Aim and Questions**

Given that the transportability of models developed abroad for the treatment of PTSD have not as yet been well documented when applied within a South African context, this study aims to systematically investigate the transportability of the Ehlers and Clark (2000) cognitive therapy model for PTSD in a South African context by: 1) documenting the treatment of an individual who meets the American Psychiatric Association's (2000) *Diagnostic and statistical manual of mental disorders*, fourth edition, text revision criteria for PTSD, 2) using the material obtained during this research study to evaluate the transportability of Ehlers and Clark's (2000) cognitive therapy model for the assessment and treatment of PTSD, and (3) considering the contextual factors which may have an influence on the effectiveness of the treatment model. Thus, this study addresses the following research questions:

- How effective is the Ehlers and Clark (2000) cognitive therapy model in the assessment and treatment of a South African individual who meets the DSM-IV-TR (American Psychiatric Association, 2000) criteria for PTSD?
- Which contextual factors have an impact on the transportability of a proven treatment for PTSD when applied to a South African context?

## 2.2 Clinical Procedures

Ehlers and Clark's (2000) cognitive therapy model for PTSD was used. The model is conceptually driven, thereby allowing the treatment model to be applied in a flexible manner as the case formulation is consulted to ensure that the needs of the individual client are met and that the treatment is effective for the specific traumatic stressor that the client has been confronted with. Prior to the commencement of the treatment, an assessment was conducted in accordance with the Ehlers and Clark (2000) cognitive therapy model. The assessment allowed for the identification of the main cognitive themes that formed the focus of clinical attention in the therapeutic process, the "hotspots", the intrusive images and the points of dissociation which created gaps within the trauma memory, the painful emotional reactions emerging following exposure to the traumatic stressor, problematic cognitive and behavioural strategies, and facilitated the process of characterising the nature of the trauma memory as well as the spontaneous intrusions (Ehlers & Clark, 2000).

The information gathered during the assessment was then used to formulate the case in order to generate a comprehensive treatment plan. Treatment goals were negotiated with the client in order to ensure that his difficulties were systematically addressed according to his needs. The researcher assumed the role of the therapist in the treatment of the client. Furthermore, supervision of both the therapist and the case formed an essential part of the treatment process and took place on a regular basis with Professor David Edwards. Although the therapist has not been formally trained, supervised or received certification from the Ehlers and Clark (2000) group, the principles of the Ehlers and Clark (2000) cognitive therapy model as reflected in the literature were adhered to and informed by Professor David Edwards' direct contact with their work. The supervision of the therapist/researcher therefore ensured that the therapeutic intervention was based on the principles advocated by the Ehlers and Clark (2000) model and that the cognitive techniques used were appropriately applied.

### 2.3 Methodological Orientation

This qualitative study approached the research questions using a case-based research design. Case-based research facilitates the refinement and investigation of clinical treatment models, as well as allows for the testing and refinement of the theory on which these treatment models are built (Edwards, Dattilio & Bromley, 2004). The nature of case-based research is characterised by the gathering of extensive longitudinal information in the form of both qualitative data about the process of each session, as well as relevant events between sessions with the participant, and repeated quantitative measures administered throughout the treatment process. These steps enable the researcher to provide detailed answers to questions about the treatment process (Edwards, et al., 2004). Systematic investigation of the transportability of a treatment model by means of multiple strategies is therefore possible.

For the purposes of this study, a case narrative was constructed and used in combination with repeated quantitative measures in an intensive analysis of a single case, thereby preserving the complexity of the client's subjective experiences. This case-based design therefore allowed for a greater understanding of the treatment of PTSD as psychological change over time was monitored.

One of the goals of case-based research is to assemble and organise the data obtained from individual case studies into an accessible database containing many cases, thereby generating knowledge grounded in a sample of contextually different situations (Fishman, 2005). The data gathered from the series of case studies is then used to provide guidance for formulation and treatment planning in future cases as past cases may have similar features to those studied in future. Conclusions are reached only when the phenomena under investigation have been empirically observed and the research results have been replicated in other case studies. While a case series investigating the effectiveness of the Ehlers and Clark (2000) cognitive therapy model has been undertaken in the United Kingdom, a South African case series is currently underway. This case will therefore contribute to a rich body of knowledge regarding the treatment of individuals with the Ehlers and Clark (2000) cognitive therapy model for the assessment and treatment of PTSD.

### 2.4 Client Selection

In selecting the client for this study, the inclusion and exclusion criteria summarised in Table 2.1 below were applied. The client was informed about the nature of the treatment offered by the therapist/researcher prior to the commencement of the cognitive therapy treatment. The use of the

data gathered for research purposes was discussed with the client when it had been assessed that he was a suitable client for the research study. Informed consent was therefore obtained directly from the client to include the documented therapeutic process in this research study. The client was required to sign a consent form, which included consent for the audio-tape recording of the therapy sessions (reproduced in Appendix A). Anonymity and confidentiality were ensured. Furthermore, careful attention was given to the client's needs and experiences throughout the research process.

Inclusion Criteria	Exclusion Criteria
1) The client must meet the full DSM-IV-TR (American Psychiatric Association, 2000) criteria for PTSD, 2) The client is a South African individual, who is able to speak English sufficiently to engage in the therapeutic process, and 3) The client must consent to the course of treatment and for the case material to be used for this research study and future publication.	1) Current substance abuse by the client, 2) Severe personality pathology, and/or 3) Psychosis.

**Table 2.1: Inclusion and exclusion criteria used to select a client**

### 2.5 Data Collection Procedures

The data collection took place at Fort England Hospital, where the therapist/researcher was completing her internship at the time at which this research study was undertaken. Data collection procedures took place in a number of steps as outlined below. Although the session times and days were negotiated on a weekly basis, the client was seen three times per week for a period of 8 weeks while an inpatient at the hospital and following his discharge from the hospital. Each session was audio-tape recorded in order to provide an objective record which could be repeatedly referred to (du Plooy, 2000). In addition, a detailed written record of each assessment and therapy session was compiled.

### 2.5.1 Psychometric Assessment Instruments

Five self-reporting instruments were administered as a means of assessing for the presence of PTSD, determining symptom severity and monitoring response to the treatment. These included:

- Beck Anxiety Inventory (BAI) (Beck & Steer, 1993), which is a 21-item measure of panic and anxiety-related symptoms as reflected in the DSM-IV-TR (American Psychiatric Association, 2000).
- Beck Depression Inventory II (BDI-II) (Beck, Steer, & Brown, 1996), which is a 21-item measure of the symptoms of depression as reflected in the DSM-IV-TR (American Psychiatric Association, 2000).
- Posttraumatic Diagnostic Scale (PDS) (Foa, 1995), which is a 17-item measure that provides information necessary to make a diagnosis of PTSD, as well as demonstrates symptom severity.
- Posttraumatic Cognitions Inventory (PTCI) (Foa, Ehlers, Clark, Tolin, & Orsillo, 1999), which is a 33-item scale designed to assess trauma-related beliefs and thoughts, thereby making the identification of the dysfunctional cognitions that are associated with PTSD possible.
- Trauma-Related Guilt Inventory (TRGI) (Kubany, et al., 1996) , which is a 32-item questionnaire measuring trauma-related guilt, which provides a Global Guilt scale, Distress scale, Guilt Cognitions scale, a Hindsight-bias/Responsibility sub-scale, a Wrongdoing sub-scale, and a Lack of Justification sub-scale.

### 2.5.2 Screening Interview

A screening interview, which took the form of a single one and half hour session, was used in order to meet the client and assess whether the inclusion and exclusion criteria developed for this research study were met. As the client had been admitted to Ward A (Neuro) at Fort England Hospital 4 days prior to the screening interview, he was provided with the opportunity to discuss the reasons for his admission, as well as to provide an account of the presenting problem. The screening interview therefore took the form of a semi-structured systematic enquiry of the client's experiences in order to assess his suitability for this study.

### 2.5.3 Assessment Interviews

Five one and a half hour assessment interviews were conducted in order to obtain a detailed family and personal history, as well as an in-depth account of the presenting problem. A mental state examination was also conducted. The interview strategy took the form of semi-structured interviews as in accordance with the Ehlers and Clark (2000) cognitive therapy model. The five aforementioned self-reporting instruments were each administered once during the assessment phase. An additional three hour session employed imaginal reliving as a means of obtaining details of the traumatic event and identifying peritraumatic hotspots (Grey, Young, & Holmes, 2002).

#### **2.5.4 Treatment Contracting**

Treatment contracting included a discussion regarding the nature of this research study and an explanation of the implications of being involved in such a study as defined in the consent form (reproduced in Appendix A). Psycho-education regarding the treatment process was provided and the case formulation was shared with the client. Furthermore, treatment goals were negotiated.

#### **2.5.5 Treatment**

The treatment consisted of 18 sessions. The nature and order of the particular interventions that were employed was based on the case formulation in conjunction with Ehlers and Clark's (2000) treatment principles. The length of each session varied as determined by the techniques to be used in the session. Psycho-educational sessions and sessions involving the use of standard cognitive techniques were approximately an hour in length, while those sessions which included imaginal reliving and imagery rehearsal were between two to three hours long. Self-reporting instruments administered on a weekly basis during the treatment included the BDI-II, BAI, and the PDS.

#### **2.5.6 Post-treatment Assessment**

The five aforementioned self-reporting instruments will be administered following the treatment as a means of evaluating the effectiveness of the treatment and symptom reduction. The client will be provided with the opportunity to provide feedback to the therapist/researcher regarding his

experience of the treatment process. Post-treatment assessment will determine whether therapeutic gains made during the treatment process are maintained.

### **2.5.7 Interview with Independent Assessor**

Another intern psychologist gathered additional data by means of a research interview, conducted after treatment session 14. A second research interview will be conducted after the treatment has come to an end. The interview guide was based on the Client Change Interview Protocol (Elliotts, 1999).

## **2.6 Data Reduction Procedures**

The data collection methods mentioned above were used to develop the following data reduction steps, which are divided into two stages:

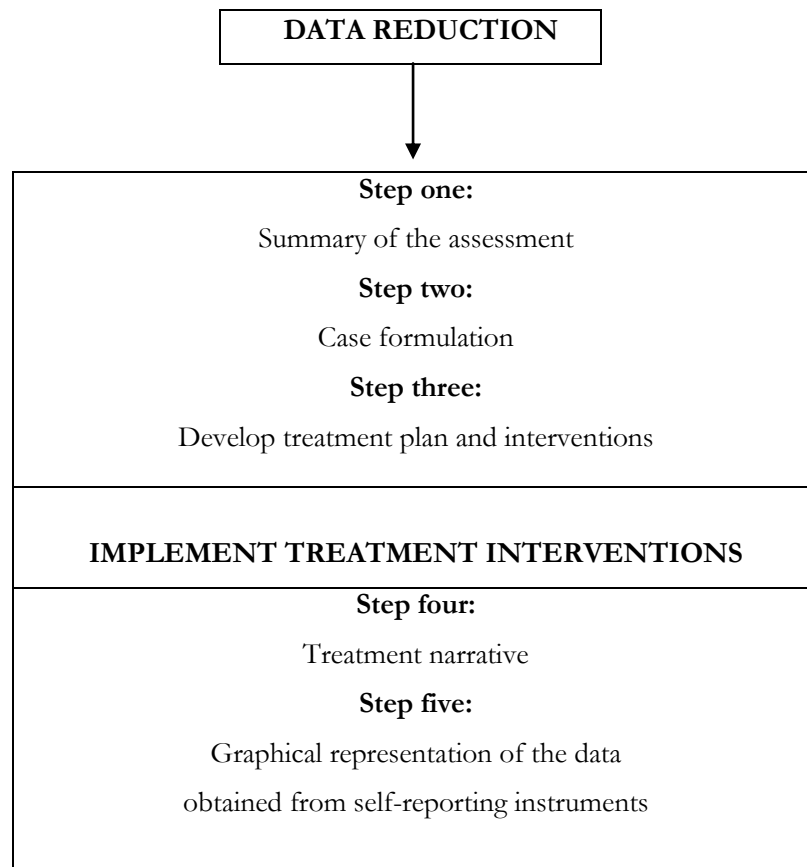
### **2.6.1 Stage One: Prior to Treatment Implementation**

- 1) A summary of the assessment data were compiled in order to provide a basis for the case formulation.
- 2) A case formulation generated from the family and personal history, as well as the presenting problem and mental state examination obtained during the assessment phase, was developed.
- 3) A treatment plan and treatment interventions were developed on the basis of the case formulation following the guidelines set out in the literature on the Ehlers and Clark (2000) cognitive therapy model, as outlined above.

### **2.6.2 Stage Two: Following Treatment Implementation**

- 1) A treatment narrative emphasising the client's experiences while engaging in the cognitive therapy treatment was compiled.

2) A graphical representation of the data obtained from the self-reporting instruments that were administered during the course of the treatment process was developed.



**Figure 2.1: Data reduction steps used during the research study**

### 2.7 Data Interpretation

The data were interpreted with the use of a hermeneutic reading method (Edwards, 1998). Such a method suggests that the data gathered during this research study were approached with the recognition that it is both historically and culturally constructed. Conceptual frames from the literature pertaining to Ehlers and Clark's (2000) cognitive therapy model for PTSD were applied as hermeneutic keys in order to illuminate the deeper dimensions of the case, thereby using existing theoretical frames as lenses for viewing the phenomena under investigation (Edwards, 1998). Two types of interpretative questioning were elicited from such a method and were used to explore the data: 1) questions emerged directly from the research questions, for example, Do the procedures

advocated by the Ehlers and Clark (2000) cognitive therapy model offer anything different from other standard procedures?, and 2) questions emerged from the specific content of the case material, for example, What advantages and disadvantages resulted from the client's inpatient status?

### **3. The Client**

Questions surrounding the nature of Mark's initial presentation to Ward A (Neuro) emerged as he had been admitted to Fort England Hospital following a series of recent suicide attempts. The particular suicide attempt that had resulted in his admission had, however, been qualitatively different to the others as his uncle had witnessed Mark holding a gun to his head. Previous attempts had been described as efforts to numb the "emotional pain" he had been experiencing. Mark's story and the events leading up to his admission were revealed partly as he disclosed in his first ward round, the violent hijacking he had been involved in two years previously, which had continued to elicit intense feelings of helplessness and worthlessness. Mark's initial account of the hijacking had been vague and lacked emotion. However, as we had started to piece his story together, it emerged that he met the DSM-IV-TR (American Psychiatric Association, 2000) criteria for Post-traumatic Stress Disorder, as well as a Major Depressive Disorder. Furthermore, Mark's initial scores on the BAI (12), BDI-II (28) and PDS (35), placed him in the clinically significant range with regard to his experience of anxiety and depression.

Mark, a 35-year-old English-speaking white South African man, had been living in a small Eastern Cape town about an hour or two away from Grahamstown by road. However, the hijacking he had been involved in had taken place in Gauteng, where he had been living prior to the event. Mark had moved to the Eastern Cape following the hijacking in July 2004 as he had reported wanting to get away from the reminders of the event and had not returned to Gauteng since this move. Mark's family members had all lived in Gauteng. His only relative in the Eastern Cape had been the uncle mentioned above. Furthermore, Mark had been married and has two daughters from this relationship. Following the infidelity on his wife's part, divorce proceedings were started. Mark had not seen his two oldest daughters since moving to the Eastern Cape following the hijacking. It had been explained that their mother, Catherine, would not allow their daughters to visit Mark in the Eastern Cape due to his "mental state".

Following Catherine's infidelity, Mark became involved in a romantic relationship with Jenny, a colleague at the time. He and Jenny had been expecting their first child when they had both been involved in the hijacking. This relationship was reported to have dissolved following the hijacking in July 2004. Although Jenny had made contact with Mark, he explained that he had been pushing her away as he had not wanted her to worry about him. The couple's daughter, Natalie (2), was born in the months that followed the hijacking. Mark had little contact with Jenny following the hijacking and had infrequent contact with Natalie following his move to the Eastern Cape.

Mark stated that he had not had or made any friends since moving to the Eastern Cape. He explained that he had found himself withdrawing from others and had spent all his spare time alone. Although he had indicated that he would have liked things to be different, he stated that things were unlikely to change due to his feelings of helplessness and worthlessness, as well as his recurrent thoughts about suicide. His occupational history was reported to have included work in supervisory and managerial positions. In addition, he had received certificates in Marketing Management while working for various companies. Following the hijacking Mark resigned from his managerial position in Gauteng, which was reported to have been the result of his involvement in the hijacking. Since moving to the Eastern Cape, Mark has had little motivation to find work. He had been involved in the running of family businesses on a part-time basis. Prior to his admission, he had started work at an auto-electrical company. Although Mark had worked there for 4 months and had informed his employers of his difficulties at the time, he had been asked to leave the company as his employers had been of the opinion that he was "mentally unstable".

Mark's relationships with both his mother and his father had been reported to be problematic. The difficulties in these relationships were reported to be the result of the absence of effective communication and affective expression on the part of Mark's parents, as well as his father's previous alcohol use and abusive nature. According to Mark, his mother had worked in the position of a Senior Data Project Co-ordinator prior to her retirement, while his father had worked as a Factory Manager for several years and owned various businesses in Gauteng and the Eastern Cape. Mark is the eldest of two siblings. His sister resides in Gauteng and has three children. Mark's relationship with his sister was also reported to be problematic as she was described as being antagonistic and deceitful.

Mark had described the early home atmosphere in which he had grown up as being one in which he could not speak about his emotions or difficulties and could not have visitors/friends at the family home. Mark reported feeling unsupported by his family members and explained that he

had learnt from an early age that he would need to take care of himself as it was unlikely that anyone else would be available to him when he was in need of help. Little was reported to have changed with regard to Mark's familial situation as he reported still feeling unsupported by his family members. Following the hijacking, both his parents and sister were reported to have made no efforts to assist him in finding help or helping him begin the process of recovery despite others' concerns that he was experiencing difficulties.

Following his involvement in the hijacking, Mark had started to abuse over the counter painkillers. In the two months prior to his admission to Fort England Hospital, there had been 10 instances in which he had overdosed on these painkillers. Mark had explained that at the time of engaging in these acts, he had not necessarily wanted to die. Rather, he described the substance abuse as an attempt to avoid the feelings of helplessness and worthlessness he had been experiencing since his involvement in the hijacking in July 2004. However, the motivation underlying the suicide attempt that had resulted in him holding a gun to his head and had contributed to his admission to Fort England Hospital, was reported to have been rooted in Mark's desire to die due to the feelings of hopelessness he had about his situation.

Mark had been referred to Fort England Hospital by a clinical psychologist, who had visited the town in which Mark had been living in on a weekly basis. A brief assessment of Mark's difficulties at the time in combination with the suicide attempt he had engaged in, resulted in his referral for inpatient treatment. He was subsequently referred to the therapist/researcher, an intern psychologist at Fort England Hospital, by the multidisciplinary team on Ward A (Neuro). Although Mark had initially viewed suicide as the only means from escaping the feelings of helplessness and worthlessness that confronted him on a daily basis, the prospect of recovery was one that Mark was motivated to pursue. This journey will be documented in the sections that follow.

#### **4. Guiding Conception and Relevant Research**

The literature providing the conceptual background for this case-based research is reviewed in the section that follows.

#### *4.1 Conceptualising Post-traumatic Stress Disorder*

It is necessary to provide an initial understanding of the term “Post-traumatic Stress Disorder” (PTSD) as an attempt is made to place the relevant literature in a context marked by human vulnerability and psychological trauma. Such a conceptualisation may be helpful in understanding the development of post-traumatic symptomatology, the repercussions of being confronted with a traumatic stressor as well as effective treatments for PTSD.

However, in understanding PTSD it is first necessary to highlight what may constitute a trauma. Edwards (2005a) observes that the use of the term “trauma” in psychiatry and/or clinical psychology deviates slightly from its more conventional use since it refers to those events that are extreme and often catastrophic in nature such that they pose a sudden threat to life or physical integrity. Examples of traumatic events include, but are not limited to, violent assaults of any nature, military combat, hijackings, being taken hostage or kidnapped, torture, being involved in terrorist attacks, incarceration, being exposed to natural or man-made disasters, being involved in accidents, and/or being diagnosed with a terminal illness.

Individual experiences of the traumatic event become a yardstick in determining whether or not a trauma has occurred as people may respond differently to events that are defined as being traumatic. Therefore, not everyone who is confronted with a traumatic event will develop PTSD. However, individuals who have little social support or who are otherwise predisposed to experiencing stress may be at risk (Tarrier & Calam, 2002; Tarrier & Humphreys, 2003).

According to the American Psychiatric Association (2000), PTSD is defined as a severe response which may be elicited when an individual is directly or vicariously confronted with an extreme traumatic stressor. The traumatic stressor evokes in the individual fear and helplessness as it is believed that one’s person is under threat. There are three characteristic categories of symptoms in PTSD: 1) re-experiencing of the traumatic event in the form of intrusive memories or nightmares, 2) persistent avoidance of stimuli associated with the traumatic event in the form of emotional numbing, detachment or behavioural avoidance, and 3) hyper-arousal which may result in startle response, insomnia and/or hyper-vigilance.

Traumatized individuals may relive the event as though it is incessantly recurring in the present even long after the danger has past (Herman, 2001). The individual may have recurrent and intrusive recollections of the event. However, recurrent distressing dreams may also occur. Dissociative states may manifest in which the individual re-experiences components of the event such that they behave as though they were experiencing the event at that moment in time. These flashbacks, although most often brief, elicit prolonged distress due to their here-and-now quality and produce heightened arousal. Triggering events that resemble an aspect of the traumatic event may result in physiological reactivity and/or psychological distress (American Psychiatric Association, 2000). Therefore, stimuli associated with the traumatic event are continually avoided. Emotional numbing, or decreased responsiveness to the external world, may also begin soon after the traumatic event (Sadock & Sadock, 2003). In addition, amnesia for important aspects of the traumatic event may be present. Diminished interest or participation in previously pleasurable activities, feelings of detachment from others, a reduced ability to feel emotions and/or a sense of a foreshortened future may also manifest following the traumatic event. The human system of self-preservation switches to a state of permanent alertness as if danger were to return at any moment (Herman, 2001). Difficulty falling asleep or staying asleep, recurrent nightmares, hyper-vigilance and exaggerated startle response may manifest as a result of this anxiety. Other symptoms such as an irritable or angry mood and difficulty in concentration are also common (Sadock & Sadock, 2003).

PTSD may occur at any age, with the symptoms usually beginning within three months of exposure to the traumatic event. However, there may be a delay in months or even in years before post-traumatic symptoms manifest (American Psychiatric Association, 2000). The symptoms of the disorder may vary over time, with symptom reactivation most frequently occurring in response to reminders of the original traumatic stressor, other life stressors or new traumatic experiences.

As traumatic events are now a common occurrence in everyday living and many victims survive these experiences without developing significant long-term pathology, questions regarding the factors which determine whether or not an individual will be able to process a traumatic event successfully arise (Hembree & Foa, 2003). In attempting to answer these questions, a clear understanding of PTSD and effective treatments in this regard must be provided, as the factors that hinder natural recovery following exposure to a traumatic stressor must be targeted.

#### *4.2 A Brief Historical Overview of the Progressive Development of Effective Theories and Treatments for Post-traumatic Stress Disorder*

The initial inclusion of PTSD in the Diagnostic and Statistical Manual III (American Psychiatric Association, 1980) and subsequent editions has given rise to a considerable amount of research into the development, maintenance and treatment of this condition. However, theories aimed at providing a conceptual framework for the treatment of PTSD appeared years before this increased interest emerged. The earliest theories that have provided an understanding of PTSD include: 1) Social-Cognitive Theories, 2) Conditioning Theories, and 3) Information-Processing Theories.

Social-Cognitive Theories, such as the Stress Response Theory (Horowitz, 1986) and the Theory of Shattered Assumptions (Janoff-Bulman, 1992), focus primarily on the manner in which the trauma infringes on existing mental structures and on instinctive mechanisms for the integration of incompatible information with previous beliefs. Social-Cognitive Theories provide detailed explanations of the wide range of emotions and beliefs elicited by traumatic events and provide a framework for understanding the process of long-term adjustment following trauma (Brewin & Holmes, 2003). However, they do not explain how PTSD is distinguished from other reactions that may occur following trauma, such as depression. Furthermore, they do not provide an explanation for the nature of responses to reminders for the trauma.

In Conditioning Theories, such as Mowrer's (1960) Two-Factor Learning Theory, learned associations and avoidance behaviours are central. Conditioning Theories provide a detailed description of how trauma cues elicit fear, as well as discuss the critical role played by avoidance (Brewin & Holmes, 2003). However, these theories do not provide insight into how post-traumatic symptoms develop, nor do they explain how data are processed during the traumatic event.

Information-Processing Theories, which have their origins in the work of Lang (1979), emphasise the encoding, storage, and recall of information for the traumatic event, as well as the associated stimuli and responses. Information-Processing Theories provide a clear account of the cognitive elements involved in the representation of the traumatic event, the effects on attention at the time of the trauma, as well as describe how processing at the time of the trauma increases the number of potential cues for the trauma following the event (Brewin & Holmes, 2003). However, these theories do not take into account the importance of the range of emotions experienced at the time of the trauma and do not consider the importance of beliefs extending beyond the aspect of danger during the event and thereafter.

Although these early theories have different frames of reference, the basic tenets of each of the classes of theory appear to overlap with regard to how PTSD develops and is maintained. While

they have their roots in these early theories, more recent theories with a broader scope have been developed by clinical researchers who are actively involved in the treatment of PTSD (Brewin & Holmes, 2003). These recent theories include: 1) Emotional Processing Theory, 2) Dual Representation Theory, and 3) Ehlers and Clark's (2000) cognitive therapy model.

Emotional Processing Theory (Foa & Rothbaum, 1998) maintains that PTSD emerges as a result of the development of pathological fear structures regarding the traumatic event. As emotions are viewed as being represented by information structures in memory, fear is viewed as being represented in memory structures such that it provides a blueprint for fear behaviours. A fear structure includes a cognitive representation of a stimulus characteristic of the fear situation, the individual's responses in this fear situation, as well as the aspects of the meaning of this fear situation for the individual. Consequently, any information that is associated with the trauma activates this fear structure. Attempts are therefore made to avoid the activation of the structure, thereby maintaining the PTSD. Foa and colleagues suggested that effective treatment for PTSD must therefore correct the pathological elements of the relevant fear structure. In order to accomplish this task, effective treatment procedures must activate the fear structure and provide information that is incompatible with the pathological elements of the fear structure so that they can be corrected.

Dual Representation Theory, which is based on the work of researchers such as van der Kolk and van der Hart (1991), suggests that pathological responses to traumatic events emerge when the trauma memory is disconnected from ordinary autobiographical memory systems. Both Social-Cognitive and Information-Processing perspectives are included in a framework which primarily makes a distinction between cognitive processes which take place at the time of the trauma and those that occur afterwards. Effective treatment procedures in the case of the Dual Representation Theory include the transformation of the trauma memory into ordinary or autobiographical memories. As the focus of the Dual Representation Theory is on the memories, emotions and appraisals for the traumatic event, little attention is given to other post-traumatic symptoms, such as dissociative responses (Brewin & Holmes, 2003).

Ehlers and Clark's (2000) cognitive therapy model currently provides the most detailed understanding of the factors involved in the maintenance and treatment of PTSD. While a number of relevant negative appraisals have been identified and expanded upon, a range of coping strategies that serve to maintain PTSD and the nature of the trauma memory are also central in the Ehlers and Clark (2000) cognitive therapy model (Brewin & Holmes, 2003). Although the Ehlers and Clark (2000) cognitive therapy model draws from the earlier Social-Cognitive, Conditioning, and

Information-Processing theories, as well as the more recent work on the Emotional-Processing Theory and the Dual Representation Theory, it was developed with the limitations of these earlier and more recent theories in mind. Many of the ideas proposed by Ehlers and Clark (2000) therefore evolved from and draw heavily on the work of other cognitive therapists. However, this model is distinct in the particular fusion it provides. In so doing, this model is both extremely comprehensive and has a great deal of explanatory power. As the Ehlers and Clark (2000) cognitive therapy model will provide the conceptual framework for this research study, it will be reviewed in a latter section of this literature review. A comprehensive account of the development and maintenance of PTSD will be provided as well as the goals of the model and evidence to support the model's efficacy.

### *4.3 The Development and Maintenance of Post-traumatic Stress Disorder*

A cognitive perspective on PTSD suggests that individuals are unique in the manner in which they think about the world, other people and themselves (Hembree & Foa, 2003). These ways of thinking have an impact on the way in which events are interpreted. Consequently, it is the interpretation of the events, not the events themselves, which elicit specific emotional responses. In this regard, cognitive theory suggests that it is the different classes of thoughts that are associated with different emotional responses. For example, thoughts about wrongful behaviour may elicit feelings of guilt, while thoughts about loss may elicit feelings of sadness. PTSD therefore develops when reactions elicited by the traumatic event are generalised to other situations and interpreted in such a way that they are viewed as threatening. Pathological responses are distinguished from the thoughts and feelings elicited from normal everyday experiences by their disruptive intensity, frequency, duration and incongruity to the situation. In this regard, it is the distorted or dysfunctional thinking, or the way in which events are interpreted, that triggers pathological or excessively emotional responses. PTSD then, develops and is maintained as cognitive schemas relevant to danger become overactive and consistently continue to structure internal and/or external experiences as indicators of danger. In this manner, the individual with PTSD fails to differentiate safe from unsafe, while continuing to label benign events as potentially dangerous (Hembree & Foa, 2003).

If individuals are to incorporate new life experiences into their fundamental schemas, it is required that they be elaborated on and integrated into the context of their former and subsequent experiences (Ehlers & Clark, 2000). It is in this way that the individual's autobiographical memory is developed. This integration of experience depends on factors such as memory processes, reflection

and social conversation, which facilitate the development of personal understandings of the meaning of events, as well as of one's identity in relation to these events. Individuals are able to describe events in detail and can explain the significance of these events in their lives only when they have been sufficiently integrated into autobiographical memory. Individuals therefore use existing models or schemas from previous experience to interpret recent events.

However, when the individual is exposed to a traumatic event, the information they are confronted with cannot be incorporated into these existing models as it is unfamiliar and has emotionally painful implications (Horowitz, 2001). Confronted with the task of integrating these incompatible pieces of information, the individual fluctuates between letting the information in which leads to overwhelming emotions, and attempts to block the information which results in feelings of numbness. This cyclical process elicits the re-experiencing symptoms that are characteristic of PTSD. It is not uncommon for this cyclical process to continue, while allowing the existing schemas time to accommodate to the new information. Cognitive consistency may be achieved and equilibrium is again restored. However, should the individual consistently block the new information, persistent post-traumatic reactions may result as the new information is not integrated into autobiographical memory and continues to intrude and be avoided. A chronic state of numbness and/or disturbing intrusions and flashbacks may occur, which contribute to the development of PTSD (Horowitz, 2001).

In an attempt to control the feelings of threat that arise from the incompatible information presented by the traumatic event, the individual may rely on a range of strategies that decreases their distress in the short-term but paradoxically maintains the post-traumatic symptoms in the long-term. These avoidance mechanisms, which are either behavioural, cognitive or emotional, are dysfunctional as they increase the frequency of intrusions, prevent elaboration on the trauma memory and prevent the disconfirmation of inaccurate beliefs that lie beneath the intense emotion that motivates avoidance (Ehlers & Clark, 2000). For example, should an individual who has been exposed to a traumatic stressor, such as a motor vehicle accident, experience intense feelings of guilt which elicit the dysfunctional beliefs "The accident was my fault" and "I should not have survived the accident", attempts may be made to control anxiety by refusing to drive a car, avoiding the scene of the accident, and/or engaging in self-blaming thinking. However, these avoidance mechanisms, although temporarily decreasing the anxiety, serve to maintain the PTSD as the individual is not provided with the opportunity to elaborate on the memory associated with being involved in the accident, prevents re-evaluation of exaggerated threat appraisals, as well as prevents habituation of anxiety responses to

cues associated with the accident (Ehlers & Clark, 2000). Rather than allowing the new information regarding the motor vehicle accident to be accommodated, efforts to block and avoid this information maintain the symptoms as the information remains incompatible with existing models or schemas.

The nature of the recovery environment following exposure to a traumatic event includes the survivor's social world and may also have the power to influence the outcome of the trauma (Herman, 2001). Supportive responses from others may ease the impact of the trauma, while negative responses may contribute to the damage already caused by the trauma itself, thereby maintaining the post-traumatic reaction. Research investigating the impact of positive and negative support following a traumatic event suggests that negative support or a negative environment is a better indicator of the development of PTSD than is the absence of positive support (Zoellner, Foa, & Bartholomew, 1999). The nature of the support sought by those who have been confronted by a traumatic event may take many forms and varies during the recovery process. The process of recovery may therefore be easier and swifter for those who have social support as they attempt to rebuild a positive view of the world, others and self.

#### *4.3.1 The Experience of Hijacking*

As the current research study will evaluate the effectiveness of the Ehlers and Clark (2000) cognitive therapy model in the assessment and treatment of a hijacking survivor, hijacking as a traumatic event will be discussed in the section that follows. However, limited material addressing the phenomenology of hijacking was available when reviewing the literature.

The rates of hijacking in South Africa have reached pandemic proportions. Recent statistical data indicating the rates of violent crime in South Africa suggest that 12 825 hijackings were reported in 2005/6 alone (South African Police Service, 2006). Of the reported cases, most hijacking survivors were robbed of their motor vehicles while they were around their homes or entering or leaving their driveways. However, these statistics reflect only those hijackings which were successfully completed, suggesting that the number of individuals involved in attempted hijackings may exceed the statistic mentioned above. Furthermore, it was indicated that hijacking survivors are typically male and that the hijacking usually takes place between the hours of 16:00 and 20:00. Hijacking, as any other traumatic event, may be life threatening and may induce the symptoms that

are characteristic of a post-traumatic reaction. The possibility of suffering long-term disability due to the hijacking subjects individuals to further trauma.

The experience of hijacking may be understood as constituting both a psychological and a physical trauma (Macgregor, Schoeman, & Stuart, 2002). A state of powerlessness is elicited as the individual is confronted with an overwhelming force, which generates a sense that neither escape nor resistance is possible. Belief systems regarding one's sense of control, meaning and connection with others are shattered. Threats to life and/or bodily integrity are a common occurrence in armed hijackings, which further contributes to a sense of helplessness and feelings of terror. Factors characteristic of the nature hijacking, such as being taken by surprise, being trapped or exposed, being physically violated or injured, and/or being exposed to extreme levels of violence, serve to heighten feelings of helplessness and terror.

A phenomenological study undertaken by Macgregor et al. (2002) was aimed at exploring hijacking survivors' experiences. Although the sample included in this study was small (n=4), thereby making the generalisability of the findings difficult, some valuable information regarding the factors that contribute to the development of PTSD and the nature trauma memory was documented. Macgregor et al. (2002) concluded that the formation of post-traumatic symptoms following the hijacking for those included in the study was linked to: 1) the nature of the traumatic event, 2) individual personality traits, 3) the nature of the recovery environment, and 4) individual coping strategies. In addition, the development of PTSD was more common in the hijackings in which the individual was threatened with death or injury. The trauma memory, which is central to Ehlers and Clark's (2000) cognitive therapy model, was characterised by: 1) heightened sensory awareness, 2) a focus on weapons used during the course of the hijacking, 3) descriptions of the hijackers, which included attention to emotions, attitudes and intentions, 4) detailed accounts of certain aspects of the trauma versus unclear or incomplete aspects for the sequence of events, and 5) depersonalisation and derealisation.

#### *4.4 Ehlers and Clark's Cognitive Therapy Model for Post-traumatic Stress Disorder*

PTSD differs from other anxiety disorders in that the anxiety that is experienced is not elicited by an appraisal of impending threat (Ehlers & Clark, 2000). Rather, the anxiety that characterises PTSD is a reaction to a memory associated with a trauma that has already taken place. Ehlers and Clark's (2000) basic assumption is that the traumatic event is cognitively processed in such a way that it

produces a sense of serious ongoing threat, thereby giving rise to the situational fear and avoidance behaviours which are characteristic of PTSD. The two processes involved here include: 1) the appraisal of the trauma and/or its sequelae, and 2) individual differences in the nature of the memory for the traumatic event, as well as its association with other autobiographical memories. Reciprocity between these two processes exists, which further contributes to the individual's inability to see the traumatic event as a time-limited experience that does not have global negative implications for the future (Ehlers & Clark, 2000).

#### 4.4.1 Cognitive Appraisals

Individual differences in the personal meaning, or appraisals, of the traumatic event and/or its sequelae may contribute to the development of PTSD (Clark & Ehlers, 2005).

##### A) Appraisals of Traumatic Event

Some individuals who have been confronted with a traumatic event are able to experience the event as a time-limited incident, which although horrifying, does not have negative implications for their future. Swift recovery following the traumatic event is characteristic should the individual be able to process the traumatic event in such a way (Clark & Ehlers, 2005). However, should the traumatic event be experienced such that excessively negative appraisals of the event are elicited, persistent PTSD develops. Exposure to a traumatic event poses a threat to one's beliefs about oneself and the world (Clark & Ehlers, 2005). Previously held beliefs are both shattered and/or confirmed by the trauma, resulting in the need to redefine such beliefs following a trauma, as well as the need to modify previously held negative beliefs in order to facilitate recovery. For example, in the case of a rape survivor, the previously held belief that the world is a safe place is shattered should the individual interpret the traumatic event as meaning "Nowhere is safe" and "I will never feel safe again".

Ehlers and Clark (2000) have identified several types of appraisals that are elicited at the time of the traumatic event. Individuals may over-generalise the traumatic event, and/or the sense of danger from the event, thereby eliciting a perception that other activities in everyday life may be more dangerous than they really are. The probability of further catastrophic events taking place is therefore exaggerated. Feelings or behavioural responses elicited at the time of the traumatic event

may also be processed in such a way that these factors have threatening implications. For example, a self-defence instructor may interpret his inability to defend himself during a violent assault as sign that he should abandon his career.

### ***B) Appraisals of Trauma Sequelae***

The meaning assigned to post-traumatic symptoms may also impact on one's ability to recover swiftly following exposure to a traumatic stressor (Clark & Ehlers, 2005). Individuals may see symptoms as an appropriate and common aspect of the process of recovery. However, others may experience symptoms in a negative manner, such that the symptoms are interpreted as a sign of "going crazy" or as a sign that they will be permanently affected by the trauma. Characteristic symptoms of PTSD such as irritable mood, emotional numbing or poor concentration may therefore be interpreted negatively.

Appraisals of other people's reactions following a traumatic event may also be negative (Clark & Ehlers, 2005). A trauma survivor may view others as being less supportive than they are expected to be or as responding in a negative way when offering help. For example, a mother's efforts to assist her traumatised daughter in preparing meals each day may be interpreted as sign that she is helpless or unable to cope on her own following the trauma.

Survivors of trauma may be affected by long-term negative consequences, such as the threat of HIV/AIDS for rape survivors or financial difficulties for those affected by natural disasters. Persistent PTSD develops when long-term negative consequences are perceived as meaning that one's life has permanently changed for the worst and/or are interpreted as being permanent negative changes in their personality or view of self (Clark & Ehlers, 2005). Perceived permanent change has been demonstrated to predict the severity of PTSD in road traffic accident, assault, and torture survivors (Foa et al., 1999).

### ***C) Mental Defeat***

Factors such as *mental defeat* at the time of the trauma and/or during previous traumatic experiences increase the likelihood of developing the above mentioned negative appraisals (Ehlers & Clark, 2000). *Mental defeat*, which emphasises the individual's inability to influence their fate, contributes to negative appraisals regarding beliefs about being weak, ineffective, and/or being unable to protect

oneself (Brewin & Holmes, 2003). *Mental defeat* evokes a perceived loss of autonomy, which results in a state of giving up efforts to retain one's own identity and will in one's mind. Those experiencing *mental defeat* typically describe themselves as feeling destroyed or like an object, and no longer care whether they live or die. Previous experiences involving trauma, weakness, or feelings of helplessness increase the likelihood that one may experience oneself as being vulnerable to danger, unable to act effectively, and/or as being the target of hostility.

#### **4.4.2 The Trauma Memory**

Ehlers and Clark (2000) propose that the individual's memory for the traumatic event may further contribute to the development of PTSD as it differs from other autobiographical memories in a problematic manner. Autobiographical memories, which are typically organised and elaborated on, allow for the intentional retrieval of memories and inhibit cue-driven re-experiencing of an event (Clark & Ehlers, 2005). Events intentionally recalled from autobiographical memory contain information about the specific event itself, as well as contextual information, which facilitates the sense that the event has happened in the past. The factors leading to the problematic nature of the trauma memory are reviewed below.

##### **A) Poor Organisation and Elaboration**

The intentional recall of the traumatic event in those affected by PTSD is poorly organised and fragmented, resulting in difficulty in intentionally retrieving a complete memory for the event (Ehlers & Clark, 2000). Difficulties in accessing details that facilitate the interpretation of the event, as well as difficulty in recollecting the temporal order of the events taking place at the time of the trauma occur. The trauma memory therefore remains in associative memory, where it is cue-driven and recalled unintentionally (Brewin & Holmes, 2003). Consequently, involuntarily triggered intrusive memories involving re-experiencing aspects of the trauma occur and are frequent, vivid and emotionally laden.

##### **B) Encoding During Traumatic Event**

The intrusive characteristics and the pattern of retrieval that is characteristic in PTSD are understood as being the result of the way in which the traumatic event is encoded and laid down in the memory (Clark & Ehlers, 2005). A distinction is made between data-driven processing, which is focused on sensory impressions, and conceptual processing, which is focused on the meaning given to a situation, the organising of the information, as well as the placing of this information in context (Brewin & Holmes, 2003). Whereas conceptual processing allows for the trauma memory to be integrated into autobiographical memory, data-driven processing results in strong perceptual priming and difficulty in intentionally recalling a memory. The manner in which encoding takes place at the time of the trauma therefore influences whether or not PTSD will develop. Furthermore, should the individual be unable to establish a self-referential perspective during the traumatic event as a result of dissociation, emotional numbing or insufficient cognitive capacity to evaluate aspects of the event accurately, the processing of the event and memory for the event will be significantly influenced.

### *C) Retrieval of the Trauma Memory*

Two routes that facilitate the retrieval of information stored in the autobiographical memory base exist (Ehlers & Clark, 2000). These include: 1) higher order meaning-based retrieval strategies, and 2) the direct triggering by stimuli associated with the traumatic event, such as sounds or smells. As events are typically incorporated into autobiographical memory when they are organised into themes and time periods, the first retrieval route is enhanced, while the second is inhibited. However, in PTSD, the trauma memory lacks context and time perspective. Therefore, the trauma memory is intertwined with previous and subsequent information, as well as other autobiographical information, which results in an inability to access this memory via the first route of meaning-based retrieval strategies. Due to poor retrieval, appraisals of the trauma and/or its sequelae are therefore influenced. For example, individuals may interpret intrusive memories as a sign that they are going mad.

#### *4.4.3 Painful Emotional Reactions*

Painful emotional reactions are elicited when memories of the traumatic event are triggered automatically by cues associated with the trauma, as well as when more conscious consideration or reflection regarding the traumatic event is undertaken (Edwards, 2005b). Efforts are made to avoid these painful emotional states by engaging in avoidance mechanisms. However, the avoidance of these emotional states interrupts the assimilation of the new information elicited by the traumatic event into the individual's existing schemas. It is therefore necessary to examine the range of painful emotional reactions elicited by the traumatic event if the maintenance of PTSD is to be understood and the traumatised individual is to be treated effectively. As several emotional states may be problematic in the maintenance of PTSD, a brief overview of each is provided below.

### *A) Fear*

An intense fear reaction, which is elicited in response to a threat to one's life and/or physical integrity imposed by the traumatic stressor, prompts the post-traumatic stress reaction (Edwards, 2005b). The memories associated with the traumatic event are therefore accompanied by these feelings of intense fear. Intense feelings of fear become problematic when they are generalised to other situations, thereby distorting the individual's experience to such an extent that an ongoing and consistent sense of threat is produced (Edwards, 2005b). In this manner, the traumatised individual anticipates and overestimates the probability that they will again be exposed to negative or life threatening events.

### *B) Shame*

Shame may be elicited in response to reactions or behaviours engaged in at the time of the traumatic event, as well as due to the emotions that may emerge during the therapeutic process itself (Edwards, 2005b). Lee, Scragg and Turner (2001) differentiate feelings of shame into those that are external and those that occur internally. External shame is elicited due to feelings related to the experience of being devalued or unworthy in relation to society. By contrast, internal shame emerges as a result of feeling devalued such that it damages one's self-identity. Irrespective of whether shame is experienced externally or internally, intense feelings of shame give rise to behaviours that are

characteristic of PTSD, such as patterns of submission, the desire to escape, and/or the tendency to hide.

### *C) Humiliation*

Humiliation arises when an individual, who is in a position of powerlessness, is ridiculed and/or abused but does not perceive that they are responsible for the unjust treatment (Lee et al., 2001). The individual who has been humiliated feels that they have been unfairly harmed, blaming others for damage to the self, thereby perceiving these individuals as bad. Humiliation and shame may occur simultaneously and frequently overlap. However, they arise from different attributional processes and must therefore be set apart if PTSD is to be treated effectively. Individuals who experience shame typically ruminate and replay the acts of humiliation in their minds (Lee et al., 2001). These cognitions may also be accompanied by intense feelings of anger as well as vengeful ideation.

### *D) Anger*

Individuals exposed to traumatic events involving intentional humiliation may experience intense feelings of anger (Edwards, 2005b). Anger is typically elicited when the individual perceives the event as unfair or abusive and may be accompanied by a need for revenge. The anger itself is therefore not necessarily problematic. Anger may be used therapeutically if it may be channelled in such a way that it leads to action and/or feelings of empowerment. However, anger becomes problematic when it disrupts the emotional processing of the event (Edwards, 2005b). More specifically, traumatised individuals may be afraid to express their anger due to a fear of reprisal or may be unable to express their anger. On the other hand, anger may become central as the individual ruminates about vengeance in a manner that does not lead to constructive action.

### *E) Guilt*

Guilt is defined as a self-conscious affect that is associated firstly, with a sense of responsibility for the occurrence of traumatic event, and secondly, to a feeling that one is responsible for the cause of harm to others (Lee et al., 2001). Guilt is therefore elicited when an individual believes that they

have done something wrong (for example, a rape survivor thinking that she could have prevented the rape in some way) and/or when they believe they have done something that has caused harm to another (for example, a husband feeling responsible for the death of his wife in a motor vehicle accident as she had wanted to stay at home rather than accompany him on his trip). Feelings of guilt may turn the individual towards others as they typically tell of their wrongdoings, while attempting to repair the damage they believe they have caused. During the aftermath of the traumatic event, the individual may think of ways in which aspects of the trauma may have been prevented and/or how they may have done more to assist others at the time of the trauma. Memories of the traumatic event may therefore be particularly difficult for those who do not see ways of resolving the guilt associated with the trauma (Edwards, 2005b).

#### *F) Disgust*

Feelings of disgust may emerge in relation to those traumatic events that involve serious injury, mutilation or burns (Edwards, 2005b). For example, research conducted by Karpelowsky and Edwards (2005) highlighted the intensity to which disgust may be experienced, thereby contributing to the development and maintenance of PTSD. This phenomenological study, which describes the psychotherapy with a university student exposed to a series of motor vehicle accidents, demonstrated that the most distressing experience for the student had been to identify his brother's mutilated and burned body.

#### *G) Sadness/Grief*

In addition to the painful emotional reactions mentioned above, a traumatic event may also result in the death of a loved one or other losses that may be difficult to accept, thereby eliciting feelings of sadness or grief (Edwards, 2005b). Intense feelings of sadness or grief may therefore contribute to the individual's difficulty in integrating the information presented by the traumatic event into existing schemas and ultimately accepting the losses involved.

#### 4.4.4 Avoidance Mechanisms

Avoidance mechanisms, which are activated to cope with the feelings of ongoing threat associated with exposure to a traumatic event and the avoidance of the range of emotions as reviewed above, contribute to the development of PTSD and need to be understood if the individual is to be successfully treated (Edwards, 2005b). Maintaining behaviours and cognitive strategies, such as rumination about the trauma, avoidance and safety seeking behaviours, perpetuate the cycle of PTSD (Ehlers & Clark, 2003). These strategies employed by traumatized individuals are maladaptive as they maintain PTSD and interfere with recovery. This is explained as the behaviours and coping strategies referred to:

- Directly produce PTSD symptoms. Individuals may engage in a number of strategies with the intention of reducing their symptoms but paradoxically increase these directly by engaging in these strategies. For example, an individual who is afraid to sleep at night as a result of nightmares regarding the trauma may attempt to stay awake at night. However, engaging in this strategy will produce other symptoms such as poor concentration and/or an irritable mood.
- Prevent changes in the individual's negative appraisals of the trauma and/or its sequelae. Individuals may engage in a number of safety behaviours with the intention of avoiding exposure to further trauma or catastrophes. However, these safety behaviours prevent the individual from disconfirming their belief that a feared situation will arise should they not engage in these safety behaviours. For example, an individual who is involved in a motor vehicle accident may repeatedly check what is happening in their rear view mirror in order to avoid another accident. However, engaging in such safety behaviours does not allow the individual to test the appraisal "If I do not check my rear view mirror, I will have another accident".
- Prevent change in the nature and experience of the trauma memory. Individuals who have been exposed to a traumatic event may attempt to distract themselves or attempt to keep busy in order to avoid thinking about the trauma. However, these efforts to avoid thinking about the trauma prevent the individual from elaborating on the trauma memory and integrating it into autobiographical memory.

These avoidance mechanisms may be behavioural (for example, avoiding reminders of the trauma, behavioural distraction, and avoiding sleep), cognitive (for example, thought suppression, self-

punitive thinking, cognitive distraction, and rumination), and/or emotional (for example, numbing, dissociation, and distancing) (Edwards, 2005b). Avoidance mechanisms may also actually increase the frequency of post-traumatic symptoms (Brewin & Holmes, 2003). Dunmore, Clark and Ehlers (1999) demonstrated that greater avoidance is not only linked to greater symptom levels but is also related to slower recovery from PTSD in assault survivors.

#### 4.4.5 Treatment Implications

The treatment of PTSD is based on the following fundamental principles (Ehlers & Clark, 2000):

- Post-traumatic stress symptoms arising following exposure to a traumatic stressor are a common initial reaction to an abnormal event. Psycho-education is thus central as the client's symptoms are reviewed and it is explained how certain aspects, such as the how-and-now quality of the symptoms, are features of the condition.
- Many of the coping strategies employed by the individual to deal with the trauma memory and painful emotional reactions may have been effective to negotiate milder stressors at other times but now maintain their symptoms.
- Treatment involves helping the client to process the trauma and integrate the updated trauma memory into autobiographical memory. In order to do this, the maintaining factors must be reversed.

On the basis of the above mentioned principles, the Ehlers and Clark (2000) cognitive therapy model for PTSD aims to facilitate change in three crucial areas:

- Modify the problematic appraisals of the trauma and/or its sequelae that maintain the sense of current threat,
- Elaborate on and integrate the trauma memory into the context of the individual's preceding and subsequent experience in an attempt to reduce intrusive re-experiencing, and
- Encourage the individual to drop dysfunctional behavioural and cognitive strategies that prevent memory elaboration, exacerbate symptoms and/or hinder the reassessment of the problematic appraisals.

### ***A) The Assessment Phase***

The assessment phase provides the framework from which the case formulation, treatment plan and treatment goals will be developed. A comprehensive account of the nature of the appraisals for the traumatic event and/or its sequelae, the trauma memory, painful emotional reactions, and avoidance mechanisms is obtained (Ehlers & Clark, 2000). The assessment phase therefore includes the identification of the main cognitive themes that will form the focus of clinical attention in the therapeutic process. The hotspots, or the parts of the memory that elicit particularly strong distress (Grey, et al., 2002), need to be identified and explored. These may be extracted by questioning the individual about the most distressing aspects confronting them since the trauma, as well as by exploring their beliefs about their symptoms, other people's reactions and their future. In addition, intrusive images and the points of dissociation which create gaps within the trauma memory need to be investigated. The painful emotional reactions emerging following exposure to a traumatic stressor may serve as clues when identifying the cognitive themes necessary for effective treatment. Problematic cognitive and behavioural strategies may be identified by questioning around how the traumatised individual is attempting to put the traumatic event in the past, how they think it is best to handle the trauma, what they currently avoid, how they cope with intrusive memories, and whether or not they ruminate about the traumatic event. Furthermore, the assessment phase includes an examination of the nature of the trauma memory as well as the spontaneous intrusions. This is accomplished by exploring the extent to which there are gaps in the trauma memory, determining whether confusion exists with regard to the memory sequences, and determining the extent to which the memory has a here-and-now quality and/or strong sensory-motor components (Ehlers & Clark, 2000).

### ***B) Goal I - Modify Negative Appraisals***

Excessively negative appraisals of the trauma and/or its sequelae need to be identified and modified (Ehlers & Clark, 2000). These appraisals are identified through careful questioning as well as identifying and exploring the hotspots. Hotspots may be identified by engaging in an initial imaginal reliving session and examining the content of intrusions. Imaginal reliving, or exposure, facilitates complete emotional processing of the traumatic event as it addresses both the nature of the trauma memory and negative appraisals (Grey et al., 2002). Socratic questioning and other standard

cognitive therapy techniques are then used to modify the negative appraisals. Alternative appraisals are generated until more adaptive and acceptable appraisals are elicited, which can then be incorporated into the trauma memory. This may be achieved through the use of a written/verbal account of the traumatic event produced by the individual in combination with imagery transformation techniques and/or by inserting the new appraisal into subsequent reliving experiences (Ehlers, Clark, Hackmann, McManus, & Fennell, 2005). However, the introduction of the new information into the existing trauma memory may also be supplemented by performing acts that provide information and sensory cues that are incompatible with the original meaning when focusing on the hotspots. The new appraisals and updated knowledge about the course of the traumatic event are therefore explicitly linked with the hotspots. Particular attention is given to the aspects of the trauma memory that the individual uses to provide evidence for their appraisals, as these are the aspects of the memory that will need to be updated.

### ***C) Goal II - Reduce Intrusive Re-experiencing***

Intrusive re-experiencing, which typically consists of brief sensory fragments of the traumatic event that are experienced in a stereotyped and repetitive manner, may take the form of flashbacks, nightmares, or other intrusive memories (Speckens, Ehlers, Hackmann, & Clark, 2006). The emotions that are associated with the intrusive memories are those that were experienced at the time of the trauma itself, while the sensory components of the memories are re-experienced as features of an immediate event, rather than as memories of the past. This phenomenon has been termed *affect without recollection* (Ehlers & Clark, 2000). The reduction of intrusive re-experiencing is accomplished by elaborating on the trauma memory and identifying the triggers which elicit the re-experiencing phenomena (Ehlers et al., 2005). Elaboration of the trauma memory aims to assist the client in developing a coherent narrative account of the sequence of events involved in the trauma, and places the traumatic event in context and in the past. Exposure techniques used to accomplish this goal include: 1) writing a detailed account of the traumatic event, which facilitates an understanding of what happened and how it happened, 2) imaginal reliving of the event, in which the client vividly imagines the traumatic event while describing what is happening, what they are feeling and thinking, is particularly useful in eliciting all aspects of the trauma memory, and 3) revisiting the scene at which the trauma took place, which facilitates the incorporation of a time perspective into the trauma memory, thereby reducing the here-and-now quality of the intrusions. Imagery rehearsal following

cognitive restructuring may be used to reduce the frequency of distressing nightmares (Forbes, Phelps, & McHugh, 2001; Krakow, et al., 2001). Discrimination of the triggers for the traumatic event is also essential in the treatment of PTSD (Clark & Ehlers, 2005). Triggers are identified through careful analysis of where and when intrusions occur. The link between the identified triggers and the trauma memory must then be intentionally broken.

#### ***D) Goal III - Drop Dysfunctional Strategies***

Dysfunctional behavioural and cognitive strategies, or avoidance mechanisms, are engaged in to reduce the sense of ongoing threat following exposure to a traumatic event but paradoxically maintain the PTSD in the long-term as they prevent elaboration of the trauma memory, as well as the reappraisal of the traumatic event and/or its sequelae. These maintaining factors must therefore be reversed. This may be accomplished by discussing the problematic consequences of these strategies with the individual through the process of psycho-education (Ehlers et al., 2005). The individual is then encouraged to drop these strategies as behavioural experimentation and cognitive restructuring are used to challenge negative appraisals and generate new information that may be incorporated into the trauma memory.

#### ***4.4.6 The Efficacy of the Ehlers and Clark Cognitive Therapy Model for Post-traumatic Stress Disorder***

Studies which have evaluated the Ehlers and Clark (2000) cognitive therapy model suggest that cognitive therapy is both an acceptable and an effective treatment for PTSD (Clark & Ehlers, 2005). In addition, gains made during the treatment process are well maintained at follow-up. In order to determine how effective cognitive therapy may be when delivered shortly after exposure to a traumatic event, Ehlers et al. (2003) compared the efficacy of cognitive therapy with a self-help booklet and a control group who received repeated assessments. Eighty five individuals who had developed PTSD three months following a road traffic accident were randomly assigned to the groups. The study investigated whether the cognitive therapy would be more effective in preventing the development of PTSD than would these other methods. Participants were required to complete a three week self-monitoring phase, after which those who did not recover were randomly assigned to receive either cognitive therapy, a self-help booklet based on cognitive-behavioural therapy, or

repeated assessments. The results of this study demonstrated that Ehlers and Clark's (2000) cognitive therapy was more effective in reducing PTSD symptoms than was the self-help booklet or the repeated assessments. Ehlers and Clark's (2000) cognitive therapy had an effect size of 2.0, which was significantly greater than that reported for the self-help booklet (effect size close to 1.0) and that reported for the repeated assessments (effect size <1.0).

In a consecutive case series undertaken by Ehlers et al. (2005), 20 individuals who met the DSM-IV-TR (American Psychiatric Association, 2000) criteria for PTSD after exposure to a variety of traumas were treated with cognitive therapy. Not only did the treatment demonstrate high acceptability, but also resulted in significant improvements in PTSD symptoms, depression and anxiety. The effect size was 2.82, which was twice as high as the average for other studies. Ninety percent of the individuals involved in the case series no longer met the DSM-IV-TR (American Psychiatric Association, 2000) criteria for PTSD at the end of the cognitive therapy treatment and improvements were maintained at a six month follow-up study.

The positive results demonstrated in the original case series were then replicated in a subsequent randomised control trial, which compared Ehlers and Clark's (2000) cognitive therapy to a three month waitlist condition (Ehlers et al., 2005). This study demonstrated that the cognitive therapy treatment for PTSD was effective in reducing PTSD symptoms, as well as psychological disability and associated symptoms of depression and anxiety. Positive treatment outcome was associated with greater changes in dysfunctional post-traumatic cognitions. No significant changes for those included in the waitlist condition were observed. Treatment gains were maintained at a six month follow-up. On the basis of the results obtained from the above mentioned studies, Ehlers et al. (2005) concluded that factors such as comorbidity, previous trauma, the type of trauma, and/or time since the traumatic event had taken place, were not associated with the treatment response. However, lower socio-economic status and lower educational levels were found to be related to a better outcome. The effect size in this study was 2.25, which is double the effect size obtained in other studies.

The studies that were briefly reviewed above demonstrate that Ehlers and Clark's (2000) cognitive therapy is effective in the treatment of PTSD. Smaller or no drop out rates, as well as larger effect sizes, indicate that this model has particular strengths.

#### 4.5 Transportability: The Issues

The studies cited above suggest that there are effective ways of treating PTSD using treatment models that have been designed in the United Kingdom, as well as in the United States of America. However, a question regarding the transportability of such models to contexts such as that in South Africa remains relatively unanswered. The transportability of a model suggests that the model, which traditionally evolves in a research setting, may be successfully applied in a more clinical setting, may be transported from one cultural setting to another, and/or may be transported from a first world setting to a third world setting (Edwards, 2005b). Schoenwald and Hoagwood (2001) suggest that there are problems surrounding transportability which may emerge from four sources, including: 1) insufficient training of those delivering treatment, 2) insufficient resources at the place of treatment delivery, 3) treatment interventions are not suited to the patient populations, and/or 4) contextual and cultural factors are not taken into account. However, there are studies that provide preliminary evidence that the basic components of PTSD treatment models can be successfully transported to routine clinical settings and different cultural contexts (Edwards, 2005b).

##### 4.5.1 Routine Clinical Settings

Gillespie, Duffy, Hackmann and Clark (2002) used the cognitive therapy treatment model developed by Ehlers and Clark (2000) in a community setting following a car bomb which exploded in Omagh, Northern Ireland in 1998. A consecutive case series involving 91 individuals who met the DSM-IV-TR (American Psychiatric Association, 2000) criteria for PTSD was undertaken. National Health Service staff, who had minimal prior training in the treatment of trauma, received brief specialist training in cognitive therapy for PTSD in order to administer the treatment. The results from this study demonstrated that those who were treated experienced a significant decline in PTSD. Furthermore, 53% percent of the participants met the DSM-IV-TR (American Psychiatric Association, 2000) criteria for an additional Axis I Disorder. However, comorbidity was not associated with poorer outcome and a significant decline in symptoms of depression was also noted. The positive findings observed in the trials evaluating Ehlers and Clarks (2000) cognitive therapy model were therefore generalised to a more clinical setting.

#### 4.5.2 Different Cultural Contexts

Further support for the transportability of the treatment of PTSD with the use of techniques used in cognitive therapy models was demonstrated by Karpelowsky and Edwards (2005). This phenomenological case study of the treatment of a black student with PTSD provided evidence for the positive effects that imagery work may have in the treatment of PTSD within a South African context. As the treatment process unfolded the client reported a decrease in the nightmares and intrusive thoughts he had initially presented with. Furthermore, scores on the BDI-II and BAI decreased significantly.

Davidow (2006) successfully illustrated the transportability of the Ehlers and Clark (2000) cognitive therapy model for PTSD in a case-based study of Oratilwe, a 21 year old black South African woman who was raped two years prior to the psychotherapeutic intervention. According to Davidow (2006), the Ehlers and Clark (2000) model has particular strengths when used in the treatment of those who are culturally diverse as she demonstrated that culture had a negligible effect in her study. Davidow (2006) concluded that the Ehlers and Clark (2000) cognitive therapy model for PTSD was not culturally biased, thereby making it accessible in a variety of frameworks and worldviews.

Nevertheless, Eagle (2005) cautions South African psychotherapists in their work with trauma. She suggests that factors such as race, class, and ethnic differences may all have a significant impact on the therapeutic process as these are areas that have resulted in turmoil in South Africa's history. However, she does suggest that PTSD has been successfully treated with the use of the Wits Trauma Model (Eagle, 2005) according to which the therapist normalises the PTSD symptoms, allows the patient to tell and retell the story, addresses the guilt involved in the trauma, encourages mastery, and facilitates the creation of meaning. In so doing, the Wits Trauma Model is similar to Ehlers and Clark's (2000) cognitive therapy model as both provide broad treatment goals which encompass the use of cognitive therapy techniques.

The Wits Trauma Model was applied by Straker (1994) in the treatment of three adolescent sisters who had developed a post-traumatic response following the death of their father in a violent attack from a vigilante group. Straker illustrates that it is possible and desirable to incorporate both African and western views when treating PTSD. She demonstrates how the intensive retelling of the story of their father's murder, which addressed their feelings of guilt in a setting that was sensitive to

cultural beliefs, allowed them to develop a new framework for the future in which they could honour their father's memory and create meaning from the experience.

## **5. Assessment and Formulation**

The assessment phase was undertaken across the first 6 sessions in order to elicit detailed information about the traumatic event in which Mark had been involved. Personal and family history was obtained and is documented in the section above that provides an introduction into the nature of Mark's difficulties. A probe imaginal reliving of the hijacking was also engaged in. The case was formulated on the basis of this information.

### **5.1 The Experience of Hijacking and Assault**

Two years prior to his admission to Fort England Hospital, Mark had been involved in an armed hijacking in which he had been assaulted. He had explained that following a late return from work, he had taken his girlfriend, Jenny, home. Jenny had been seven months pregnant at this time and had been living with her parents in a suburb south of Johannesburg. Although the couple had frequently returned home late following dinners and other social activities, they had always phoned ahead and asked Jenny's parents to expect and prepare for their arrival at a certain time. However, on this particular occasion, Mark had not phoned ahead as he was of the opinion that it was early enough in the evening.

On arrival at the house, Mark had turned to Jenny to kiss her goodnight and had heard a tap on his car window. Two armed men were standing on either side of the car and shouted to both Mark and Jenny to get out of the vehicle. As Mark had opened his door, he had been pulled out of the car by one of the hijackers, hit with a firearm over the head, and was assaulted when he fell to the ground. The type of firearms used during the hijacking and the manner in which the hijackers had handled their firearms, as well as Mark and Jenny, resulted in Mark thinking that the hijackers were policemen. While being assaulted, Mark had attempted to make his way to Jenny as the second hijacker had been with her and he had heard her screaming on the other side of the car. However, he had been unable to do so as he had been overpowered by the hijacker who had been assaulting him. Mark and Jenny were left lying in the driveway as the hijackers fled in Mark's car.

Jenny's parents, who had been indoors during the traumatic event, had assisted Mark and Jenny following the hijacking. However, Mark had been most concerned about finding out what had happened to Jenny during the hijacking. As he had been unable to see her for the duration of the incident, he was unaware of whether or not she had been harmed in any way. Mark's concerns included that she had been assaulted, hit or kicked in the stomach, and/or raped. He reported that he had asked her what had happened several times on the evening of the hijacking. However, she had not provided him with any answers that night. Mark was still unaware of Jenny's experience of the hijacking at the time of the assessment phase.

During the months that followed the hijacking, Mark's relationship with Jenny dissolved. He was hospitalised for a week in a psychiatric ward but could not recall the details of this admission as he had been heavily sedated. He had limited contact with Jenny until the birth of his daughter two months following the hijacking. However, shortly after the birth of his daughter, Mark resigned from his job, moved to the Eastern Cape as his parents had a holiday house here, and withdrew from his parents, his children and Jenny.

### *5.2 Imaginal Reliving Within the Assessment Phase*

Imaginal reliving was used during the assessment phase to elicit all aspects of the trauma memory, thereby making the identification of the hotspots, negative appraisals, and the nature of the trauma memory, possible. However, Mark had initially been reluctant to engage in the imaginal reliving of the hijacking. He reported concerns about how he may react in such a situation. Psycho-education regarding the unprocessed nature of the trauma memory was engaged in and time was taken to explore Mark's feelings about the imaginal reliving in greater depth. Mark reported feeling more comfortable following this discussion. The imaginal reliving of the hijacking took place in the session that followed. Mark was provided with the space to vividly imagine the traumatic event while describing what was happening, how he was feeling and what he was thinking. The use of this exposure technique in this three hour session facilitated an understanding of the factors that had both contributed to the development and the maintenance of PTSD in this case. The information obtained during the imaginal reliving session is documented below.

### 5.2.1 Hotspots

The aspects of the traumatic event which were heavily laden with emotion and were experienced as moments of peak distress during the trauma, included:

- The tap on the car window by the hijackers – Mark reported feeling intense and immediate fear when hearing the tap on the window as he stated knowing at that point what was about to happen, i.e. A hijacking was about to take place.
- The assault – Mark reported intense feelings of helplessness as he could not do anything to defend himself and was experiencing severe physical pain.
- Hearing Jenny’s screams – Mark could not see Jenny while he was being assaulted but could hear her screaming. He could not reach her, which was reported to have resulted in further feelings of helplessness, as well as feelings of worthlessness as he had been unable to protect her.

### 5.2.2 Negative Appraisals of the Trauma and the Trauma Sequelae

Although Mark was able to experience the hijacking as a time-limited incident, the painful emotional reactions elicited during the time of the trauma persisted, resulting in these being experienced as having negative implications for his future. Mark’s previously held belief that he was someone who was physically competent and able to defend himself was shattered during the hijacking. He had viewed himself as someone who could protect his partner, which had also been challenged during this incident. These shattered beliefs about himself evoked the feelings of helplessness and worthlessness which were generalised to situations extending beyond the hijacking. However, his beliefs regarding women as vulnerable and weak were confirmed by this incident, as well as his views of policemen as corrupt and malevolent. His post-traumatic reaction following the hijacking was experienced as confirming his helplessness and worthlessness, as he struggled to negotiate these feelings and was told by family members to “snap out of it”, which he found impossible to do. Other symptoms, such as poor concentration and labile mood, were also interpreted as evidence for the extent to which Mark’s life was permanently changed following the hijacking.

### 5.2.3 The Nature of the Trauma Memory

Points of dissociation, or gaps within the trauma memory, were not evident during the assessment phase. No confusion with regard to the memory sequence or the temporal order of events was noted. However, the aspects of the trauma memory that were heavily laden with emotion were passed over rapidly, making it necessary to engage in additional imaginal reliving sessions following the assessment phase in order to obtain greater detail for these hotspots. The nature of Mark's memory for the hijacking was characterised predominantly by *affect without recollection* (Ehlers & Clark, 2000). Although when thinking about the hijacking it was experienced as an event from the past, intense feelings of anxiety and other anxiety-related phenomena, such as heart palpitations, night sweats and incontinence, would confront Mark on a daily basis and would be present at times when he could not link these experiences to anything happening in the here-and-now.

Table 5.1 below provides additional information obtained during the assessment phase regarding Mark's experience of the hijacking and assault. Mark's appraisals of the trauma and the trauma sequelae, the painful emotional reactions elicited in response to the trauma, and the avoidance mechanisms he had engaged in following his involvement in the hijacking, are summarised below. These aspects of Mark's experience of the trauma were investigated during the assessment phase as in accordance with the Ehlers and Clark (2000) cognitive therapy model. However, as Mark's depressed mood was prominent during the assessment phase, mood congruent cognitions were also elicited. Further appraisals of the trauma and the trauma sequelae were identified as the treatment progressed and Mark's mood improved.

Key appraisals uncovered during the	<ul style="list-style-type: none"><li>▪ I am responsible for the hijacking</li><li>▪ I should have been able to protect Jenny</li><li>▪ All policemen are corrupt and abusive</li><li>▪ If I cannot protect Jenny, she will not want to be with me</li><li>▪ If Jenny was raped, I should have died during the hijacking</li><li>▪ I am helpless</li><li>▪ If I am helpless, I am worthless</li><li>▪ I should not have let my guard down</li></ul>
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assessment ...	<ul style="list-style-type: none"> <li>▪ I should have phoned ahead</li> <li>▪ I should not have worked late – I should have told my boss no</li> <li>▪ I should have been able to see the hijackers approaching the car</li> <li>▪ Women are vulnerable and weak</li> <li>▪ I need to look after myself, no one will be there for me if I need help</li> <li>▪ If I do not look after myself, I will die</li> <li>▪ I cannot trust anyone</li> </ul>
Avoidance mechanisms ...	<ul style="list-style-type: none"> <li>▪ Behavioural - avoiding reminders of the trauma such as police-related phenomena and talking to Jenny about the hijacking</li> <li>▪ Cognitive - thought suppression, self-punitive thinking, cognitive distraction</li> <li>▪ Emotional - abuse of painkillers</li> </ul>
Painful emotional reactions ...	<ul style="list-style-type: none"> <li>▪ Helplessness due to the Mark's perceived inability to protect himself or Jenny and the memory for the trauma</li> <li>▪ Guilt as a result of not being able to protect Jenny</li> <li>▪ Worthlessness as a result of feeling helpless and the memory for the trauma</li> <li>▪ Shame as a result of the shattered belief that Mark had of himself as being physically competent and able to take care of himself</li> <li>▪ Anger directed at the hijackers</li> <li>▪ Fear which was elicited by the threat to Mark's and Jenny's life and physical integrity</li> </ul>

**Table 5.1: The experience of hijacking and assault**

### 5.3 Provisional Diagnosis

Mark's experience as reflected in the 5 assessment interviews and the probe imaginal reliving suggested that he met the DSM-IV-TR (American Psychiatric Association, 2000) criteria for two Axis I disorders. The primary diagnosis made was that of Post-traumatic Stress Disorder, Chronic. During the assessment phase, Mark had reported re-experiencing symptoms following his involvement in the hijacking in 2004. He reported intrusive images for the traumatic event, more specifically images of Jenny during the aftermath of the hijacking, as well as recollections of her screams during the hijacking. Recurrent distressing dreams were also reported to be present since the hijacking. Although the content of these nightmares was not always directly related to the hijacking, these dreams typically involved Mark either needing to help or save another, or he himself, being in a position of helplessness. Other sleep-related difficulties were reported to have accompanied these nightmares, including incontinence, night sweats and a fear of going to sleep at night.

Although Mark could not identify cues for the traumatic event during the assessment phase, he reported high levels of distress when in the absence of any real danger. Active social withdrawal was reported to have been the result. Furthermore, he had been engaging in efforts to avoid stimuli associated with the trauma, such as the avoidance of police-related phenomena, conversations with others about the hijacking, and had been abusing over the counter painkillers in an attempt to avoid the feelings and thoughts associated with the trauma.

Although Mark withdrew from his relationships with others, he reported feelings of detachment in situations when he had interacted with others. Concentration difficulties and feelings of "jumpiness" were also reported. Finally, Mark had viewed the traumatic event as having negative implications for his future due to the intense feelings of helplessness and worthlessness that had been elicited, which in turn, were reported to have created a sense of foreshortened future.

While PTSD appeared to capture Mark's experience following the hijacking, his symptoms worsened and mood deteriorated significantly in the two months prior to his admission to Fort England Hospital. During these months, Mark reported experiencing a depressed mood. Significant weight loss of between 20 – 25kg was reported. Mark's feelings of helplessness and hopelessness about the future were reported to have increased, resulting in suicidal ideation and recurrent suicide attempts, as mentioned earlier. A second diagnosis, Major Depressive Disorder, Single Episode, Mild, was given to account for the emergence of these new symptoms.

## 5.4 Case Formulation

### 5.4.1 Predisposing Factors

In understanding Mark's presentation, it is first necessary to examine his early home environment, his family of origin and the possible predisposing factors therein that resulted in his difficulties and the development of PTSD and major depression. The family history provided and Mark's account of his experiences as a boy illustrate that he was born into an authoritarian and patriarchal family in which consistent nurturance and affection were absent. Feelings of helplessness with regard to his familial situation were likely to have been present. Mark's father's alcohol use resulted in secrecy in the family and the need to have things happen "behind closed doors", which in turn manifested in the absence of support outside of the family unit as Mark was not permitted to have friends visit, contributing to his sense of isolation. The punitive and often harsh discipline within the family meant that Mark would need to learn how to pacify himself, possibly evoking a sense of being unworthy of care. Mark's mother's role in the family unit was one characterised by passivity as she too was verbally abused and hit by her husband on occasion. Being witness to his mother's role and her own suffering, Mark learnt to perceive women as vulnerable and weak.

However, he prepared for the time at which he would be able to stand up to his father and protect his mother as she had been unable to do so herself. His views of himself as physically competent and as being able to defend himself and those less dominant, therefore are hypothesised to have originated and been reinforced by his family of origin. Within his family of origin, Mark learnt that he would need to take care of himself as others would not be available to do so, giving birth to his views of himself as needing to be self-reliant and perpetuating his sense of mistrust in others. Rather than being a child within the family system cared for and protected by parents, Mark perceived his role as that of a protector.

### 5.4.2 Maintaining Factors

Mark's post-traumatic response is hypothesised to have been maintained both by the negative appraisals arising during the hijacking and during the aftermath of the hijacking (see Table 5.1), as well as the avoidance mechanisms relied on to escape the trauma memory and his feelings of shame and guilt. Although the onset of Mark's post-traumatic reaction appeared to have manifested sharply

after the hijacking, he had been engaging in certain strategies in an attempt to alleviate the anxiety he was experiencing due to the feelings of fear, helplessness, worthless and anger that had been elicited during the traumatic event. Since being involved in the hijacking, Mark had attempted to avoid reminders of the trauma. He had limited contact with Jenny and had resisted asking her about her experience of the hijacking due to his feelings of shame and guilt. In addition, he had avoided police-related phenomena as he had believed that the hijackers had been policemen. He had engaged in thought suppression, self-punitive thinking, and cognitive distraction in order to avoid thinking about the hijacking and the painful emotional reactions elicited.

The lack of social support available to Mark and his inability to “look after himself” and to “snap out of it” in the aftermath of the hijacking, reinforced the painful emotional reactions elicited by the traumatic event giving rise to despair as he remained trapped in the experience of the trauma and perceived his post-traumatic response as having negative implications for his future. Furthermore, he had withdrawn from his family, essentially isolating himself from others, in order to “protect” them from his experience, thereby avoiding his feelings of shame and guilt. Abuse of over the counter painkillers since the hijacking had also been engaged in and was described as efforts to numb the “emotional pain” he had been experiencing. These avoidance mechanisms served to maintain Mark’s PTSD as they prevented elaboration on and integration of the trauma memory, and prevented change to his negative appraisals of the hijacking and the consequences thereof. However, the beliefs underlying these avoidance mechanisms require further investigation and exploration.

Mark’s perceived inability to protect Jenny and defend himself during the hijacking, activated his core schemas involving mistrust in others, helplessness and worthlessness, which originated from his early experiences in the family unit. Since being involved in the hijacking, Mark had not challenged these core beliefs about himself. Rather, he had been actively attempting to thrust these thoughts out of mind by engaging in the avoidance mechanisms mentioned above. The memory for the trauma and the painful emotional reactions elicited as a result therefore remained unprocessed. Due to the unprocessed nature of this experience, it was unlikely that it had been incorporated into autobiographical memory, thereby allowing for the occurrence of *affect without recollection* (Ehlers & Clark, 2000) that Mark had been confronted with on a daily basis. Due to Mark’s active social withdrawal and his failed efforts to “blank out” the trauma memory, comorbid depression was also present and was maintained by his difficulty in effectively addressing the feelings and beliefs that had been elicited by the trauma.

### 5.5 Treatment Plan

The treatment plan was developed following the assessment phase and drew from the information obtained during the assessment interviews, the probe imaginal reliving of the traumatic event, the case formulation, as well as the relevant theory regarding the Ehlers and Clark (2000) cognitive therapy model. Table 5.2 below provides a summary of this treatment plan. An outline of the initial treatment goals and the corresponding interventions are provided. The number of sessions to be included in the treatment was not specified to allow the process to unfold. In addition, the treatment plan was developed to ensure flexibility as it was hypothesised that it may need to be modified with the emergence of new information.

<b>Goals of Treatment Intervention</b>	<b>Interventions to be Implemented</b>
1) Reduce suicidality and encourage future planning  2) Promote social support  3) Reduce intrusive re-experiencing	<ul style="list-style-type: none"> <li>▪ Psycho-education regarding diagnosis and treatment process</li> <li>▪ Negotiate treatment goals and suicide contract</li> <li>▪ Develop reengagement plan regarding Mark's plans and goals for the future</li>   <li>▪ Use the hospital setting as a means of support until further support can be generated</li> <li>▪ Psycho-education for family members</li> <li>▪ Include Jenny in the treatment intervention</li>   <li>▪ Imaginal reliving in order to elaborate on the trauma memory</li> <li>▪ Cognitive restructuring</li> <li>▪ Cognitive restructuring within imaginal reliving</li> <li>▪ Identify triggers and challenge links through</li> </ul>

<p>4) Create a coherent narrative</p> <p>5) Modify negative appraisals</p> <p>6) Challenge hindsight bias</p> <p>7) Drop avoidance mechanisms</p>	<p>the use of a trigger record/diary</p> <ul style="list-style-type: none"> <li>▪ Reduce nightmares with imagery rehearsal and keep a nightmare diary</li> <li>▪ Exposure techniques involving Jenny and the police</li> <li>▪ Repeated imaginal reliving of the hotspots</li> <li>▪ Cognitive restructuring within imaginal reliving in order to insert updated and corrective information</li> <li>▪ Identify hotspots with the use of imaginal reliving</li> <li>▪ Cognitive restructuring</li> <li>▪ Cognitive restructuring within imaginal reliving</li> <li>▪ Socratic questioning</li> <li>▪ Exposure techniques involving Jenny and the police</li> <li>▪ Verbal challenging of beliefs through Socratic questioning and reality checking</li> <li>▪ Thought records</li> <li>▪ Evidence-based arguments</li> <li>▪ Psycho-education regarding hind-sight bias</li> <li>▪ Explore the origins of these beliefs</li> <li>▪ Psycho-education about the maintenance of PTSD</li> <li>▪ Identify and become aware of the avoidance mechanisms engaged in</li> <li>▪ Develop more adaptive coping strategies</li> </ul>
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8) Monitor progress	<ul style="list-style-type: none"> <li>▪ Use self-reporting instruments throughout the treatment intervention</li> <li>▪ Gain additional information from an independent assessor</li> </ul>
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**Table 5.2: Treatment plan using the Ehlers and Clark (2000) cognitive therapy model**

## **6. Course of Therapy**

The treatment was implemented in accordance with Ehlers and Clark’s (2000) cognitive therapy model and was broadly aimed at: 1) modifying Mark’s negative appraisals of the trauma and the trauma sequelae, 2) reducing intrusive re-experiencing, and 3) encouraging him to drop dysfunctional strategies that served to maintain the PTSD. These goals were addressed concurrently in many of the sessions.

### **6.1 Future Orientation and Building Support: Sessions 1 - 2**

Prior to his admission to Fort England Hospital, Mark had been doing some research of his own in order to shed light on the difficulties he had been experiencing. However, he had reported not being able to find solace in his investigations. His attempts to find a label that best suited his experience had been perceived as fruitless as the conceptual understanding necessary to use this information as a point of departure for recovery had been absent. As Mark had expressed a desire to be made aware of the name for his experience during the assessment phase and psycho-education would be pivotal during the treatment, a session which was focused on providing Mark with this information launched the treatment process.

The first session involved in the treatment was spent not only providing Mark with the symptoms and associated features characteristic of the experience of PTSD and Major Depressive Disorder, but also sharing an understanding of the precipitating and maintaining factors involved. This initial session was individualised as the therapist used information obtained from the assessment phase to provide Mark with examples that were specific to his difficulties at the time. However, emphasis was also placed on normalising these difficulties as Mark had found it difficult to acknowledge the profound impact the hijacking had on him. Mark’s response to the information

that was shared with him was one of relief as he had been searching for answers that would help him better understand the whirlwind of emotion he had been experiencing since the hijacking. He reported being able to make sense of the conceptual understanding provided. By sharing her understanding of Mark's difficulties, the therapist perceived this point of the therapeutic interaction as the start of the difficult journey that lay ahead for both a hijacking survivor and an intern psychologist.

Mark was not only equipped with fundamental knowledge regarding the nature of the therapeutic process that lay ahead, but also reported being in a better position to view recovery as a possibility. However, Mark's experience of a depressed mood and feeling that "I should have died during the hijacking" was still prominent. He described his experience at this time as follows: "It feels like the worlds against you, feeling like a burden ... I feel like a burden to everyone ... worthless ... hopeless". A no-suicide contract was negotiated and Mark was encouraged to view Ward A (Neuro) as a support structure as he had limited social support apart from the hospital setting as the treatment commenced.

Psycho-education was coupled with an emphasis on future planning as Mark was encouraged to set goals for his future. These goals were discussed in session 2. Mark had initially stated "I can't see a future ... I live day to day" during the assessment phase. However, at this early point in the treatment process, he had moved to a position in which he had been able to create a short list of things he had wanted to achieve in both the short-term and the long-term. Among these goals included his plan to visit Gauteng in September in order to attend his daughter's second birthday party.

Mark had been without a support system in the town in which he had been living prior to his admission to Fort England Hospital as he had moved to the Eastern Cape, leaving all his family and friends in Gauteng. Although he had been encouraged to view Ward A (Neuro) as a support structure that had been previously absent, Mark would not remain on the ward indefinitely and the building of support outside of the hospital setting would therefore be necessary to facilitate recovery.

Mark had reported viewing his parents as being unsupportive. They had been aware of his involvement in the hijacking in July 2004 and had noticed a deterioration in his functioning following this event, as had others who had been close to him. However, it appeared that no one had taken steps to provide Mark with the help he had needed, possibly due to his avoidance of others.

Jenny had been informed about Mark's admission to Fort England Hospital by his sister. At this point she initiated contact with Mark as she had been concerned about him. However, following

the discussion about Mark's goals for the future, he initiated contact with Jenny as he shared in his plans to visit Gauteng with her. She, in turn, had responded favourably to this idea, which resulted in more frequent contact in order to plan this visit. The increased contact with Jenny was encouraged and was experienced by Mark to be a great source of support. Further support would be needed, however, following Mark's discharge from the hospital.

Both his mother and his father had been present when he had been admitted to Fort England Hospital and his mother made the move from Gauteng to the Eastern Cape in the weeks that followed. The possibility of including his parents in some of the sessions in order to generate further support was put forward to Mark as the treatment commenced. The benefits of engaging in psycho-educational sessions with his parents were discussed and it was suggested that if they were aware of the extent of the difficulties he had been experiencing, they may be better equipped to help and provide him with the support that he had needed. However, Mark had stated that he had not wanted his parents to be included in the treatment in any way. His feelings in this regard were explored. However, he remained certain that he had not wanted his parents involved. The possibility of including others in the treatment was also discussed. However, Mark reported feeling comfortable only with Jenny's involvement in the treatment. His ideas in this regard remained constant throughout the treatment.

## *6.2 Imagery Rehearsal to Address Nightmares: Sessions 3 – 5*

During the assessment phase and through the negotiation of the treatment goals, it became clear that Mark's sleep-related difficulties were one of his foremost concerns due to frequent nightmares accompanied by night sweats, incontinence, and a fear of going to sleep at night. Feelings of shame and anger were present due to the incontinence as this was viewed as a loss of control and accompanied by the belief "men do not lose control". Although not always directly related to the hijacking, Mark's nightmares consistently had a theme of violence and typically involved him either needing to save or protect another, or he himself being in a position of helplessness. Mark's level of distress in relation to these nightmares and his concern that others on Ward A (Neuro) may find out about his incontinence at night were considered, and resulted in the decision to address Mark's sleep-related difficulties at this point in the treatment.

The treatment included three sessions focusing specifically on imagery rehearsal to address Mark's nightmares. The first of the three sessions was focused on psycho-education with regards to

nightmares following exposure to trauma. Mark was provided with some basic information and the use of a nightmare diary was introduced. The nightmare diary was used to record nightmares, as well as other information such as the quality and quantity of sleep, feelings and level of distress associated with the nightmares, and changes to the content of the nightmares. A rationale regarding the use of imagery rehearsal to address nightmares was also provided and the guidelines for doing so were discussed.

However, the imagery rehearsal itself was done in sessions 4 and 5. The steps involved in the restructuring of these nightmares were practised, and included the restructuring and reliving of a recent nightmare that was experienced as not too threatening, although having a distress score in the severe range. Mark used his nightmare diary to record the nightmare as he had experienced it two nights prior to the session. Discussion of the distressing aspects of the nightmare highlighted the parts of the nightmare that would need to be changed. Time to reflect on these aspects, as well as the way in which these aspects would be changed took place, after which Mark once again recorded the changed nightmare in his diary. Imagery rehearsal followed as Mark was asked to vividly imagine the restructured dream from beginning to end during the session. Discussion following the imagery rehearsal assessed Mark's level of distress, which no longer fell within the severe range.

An example of a nightmare that was transformed to elicit more positive feelings includes: Mark was on a speed boat with another man and two women. He could not recognise these individuals but was aware that they were being chased by something. While attempting to escape on the speed boat, Mark had noticed that one of the motors was not working. The speed boat could not be stopped as they were being chased, which resulted in attempts being made to fix the motor while the boat had been in motion. At this point, one of the women fell into the water. Mark reported intense feelings of panic as he feared that this woman would be hurt if she were to go under the motor. He jumped into the water to save her. As he did so, he woke up. When awake, Mark felt unsettled as a result of this nightmare. He rated the nightmare as having a distress score of 4, indicating a severe level of distress. The content of this nightmare was changed using the above mentioned steps as follows: Mark was on a speed boat with some friends. Rather than being chased, Mark was enjoying a relaxing time on the boat. His female friend decided to jump into the water in order to make use of a super-tube that had been attached to the boat. Mark jumped into the water after his friend as he had wanted to join in on her fun in the water. As the boat had not been far from the shore, Mark and his friend then swam back to shore, where they enjoyed cocktails on the beach for the remainder of the day.

Mark responded to the sessions focused on the imagery rehearsal with excitement at the prospect of being in control of his nightmares. He felt a sense of empowerment which had been absent prior to this point in the therapeutic interaction. He reported being motivated and confident to continue the imagery rehearsal process on his own should he experience a nightmare. Following session 4, the quality and quantity of Mark's sleep improved dramatically. The incontinence and night sweats that had accompanied his nightmares stopped. In addition, the duration of his sleep increased from three hours to six hours.

### **6.3 Imaginal Reliving and Cognitive Restructuring to Reduce Intrusive Re-experiencing and Modify Negative Appraisals: Sessions 6 – 8**

Although an imaginal reliving session had been engaged in during the assessment phase and had started the process of allowing Mark to address the memory for the hijacking, this memory had not yet been updated. He still reported feelings of helplessness and worthlessness with regard to his perceived inability to protect Jenny during the hijacking, was experiencing intrusive memories for the trauma, reported feeling a sense of responsibility for the hijacking, and hind-sight bias was prominent. Furthermore, it was hypothesised that additional hotspots would be identified in subsequent imaginal reliving sessions. Consequently, a second session focusing on the imaginal reliving of the hijacking took place during the second week of the treatment.

During the second imaginal reliving, Mark once again reported feeling intense and immediate fear when hearing the tap on the car window as he became aware that a hijacking was about to take place, reported intense feelings of helplessness as he could not do anything to defend himself and was experiencing severe physical pain, and reported further feelings of helplessness, as well as feelings of worthlessness, when hearing Jenny's screams.

However, perhaps one of the most important hotspots was identified during this subsequent session. As Mark relived the assault during the trauma, he rapidly passed over a point during the hijacking which had included the hijacker holding a gun to his head. This aspect of the imaginal reliving of the hijacking was noted not to have been included in the imaginal reliving that had taken place during the assessment phase, highlighting the undifferentiated nature of this aspect of the trauma memory. Mark was asked to "stop and rewind" to this point of the trauma in order to facilitate the emergence of additional detail for this point of the trauma memory, as well as to determine the level of distress with which he had experienced this point of the hijacking.

D: I keep feeling blows against my body ... he keeps kicking me ... I can hear him screaming

T: What is he saying?

D: Stay down! ... Stay down! ... I just see two feet coming towards me ... the second hijacker

T: What does he look like?

D: I never saw him ... I feel a kick against my face ... kicks me against my face (long pause)

T: What is your level of distress?

D: 10

T: What are you thinking?

D: Death (long pause)

T: Who's death?

D: Mine ... I feel a gun against my head ... it was sore ... he hit it hard against my head ... the other ones shouting "leave it alone, leave it alone". Can't see anything, still darkness ...

The point at which the hijackers had held the gun to Mark's head was identified as the point at which he had experienced himself as being completely ineffectual and weak. Mark had been convinced that the hijacker who had assaulted him would kill him at this point. As the gun was held against his head, Mark prepared himself to die. He described intense feelings of helplessness and reported no longer caring whether he lived or died. Although Mark had not been as descriptive with regards to this hotspot as he had been with the others, the intensity with which this hotspot was experienced was evident as Mark's emotions when reporting this hotspot consumed the room.

Although this newly identified hotspot was central in the second imaginal reliving of the hijacking, attention was also given to those hotspots which had been identified previously. The updating of the trauma memory within the imaginal reliving was centred on Mark's knowledge that Jenny had survived the hijacking and his daughter had been born healthy two months following the hijacking. However, an emphasis on Mark's own survival facilitated the process of further exploring the critical hotspot mentioned above. Thoughts at the time of the hijacking were explored as Mark reported thinking that he had been doing all he could to ensure his own, as well as Jenny's survival. Mark's thoughts at the time of the hijacking were therefore reflected on as being markedly different to those arising during the aftermath of the trauma.

Additional cognitive restructuring took place following the imaginal reliving as attempts within the imaginal reliving to challenge Mark's sense of responsibility for the hijacking, as well as his hind-sight bias, did not appear to result in any significant shifts. The intensity and immediacy with

which these aspects were experienced further facilitated the therapist's decision to address them directly after the imaginal reliving. Psycho-education regarding hind-sight bias was provided and a basic thought record challenging these beliefs was created.

The following appraisals that had initially been identified during the assessment phase were still prominent:

- I should not have let my guard down
- I should have phoned ahead
- I should not have worked late – I should have told my boss no
- I should have been able to see the hijackers approaching the car

However, the discussion that followed the imaginal reliving provided Mark with the opportunity to provide answers to and realistically assess these appraisals and the sequence of events during the trauma. The above mentioned appraisals were modified as follows:

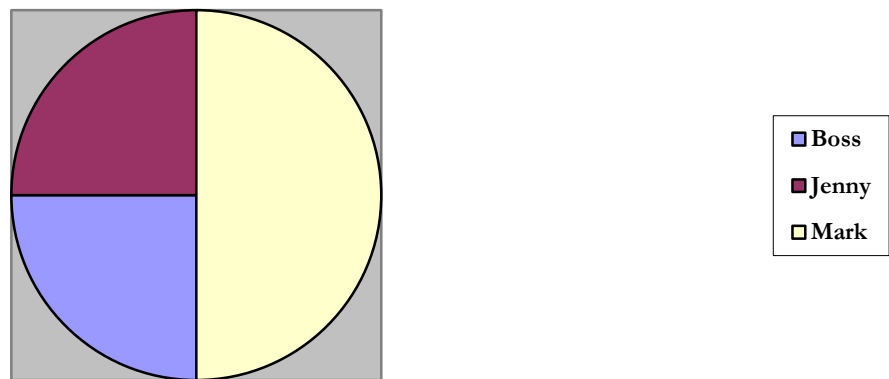
- My guard was down because I felt all was clear - I had turned on my bright lights as I approached Jenny's house, I couldn't see anything
- I did not phone ahead because I thought it was early - it wasn't that late - I thought all would be fine
- I worked late because I wanted to wake up later the following day - if I did the work that night, it wouldn't be such a rush the next morning to get to work
- I did not see where the hijackers came from - I checked for hijackers as I approached Jenny's house, I couldn't see anyone

Mark reported increased insight into how the appraisals arising in the aftermath of the trauma were unhelpful in the recovery process and how they had also contributed to the maintenance of the PTSD. Although Mark was able to relinquish his hind-sight bias as it was challenged during the session, he appeared to find it difficult to abandon or even share the responsibility he felt for the hijacking. His feelings of responsibility were thus central throughout the treatment and will be discussed separately below.

#### 6.4 Responsibility for the Hijacking: Sessions 6 – 8

The experience of being responsible for the hijacking was addressed in most sessions as Mark appeared really to struggle with the idea that he may not actually be responsible for the trauma. However, significant work regarding his sense of responsibility for the hijacking took place in sessions 6 – 8 following the imaginal reliving of the trauma. Mark's sense of responsibility is discussed separately as it was pivotal in his recovery and was an exciting process to watch unfold. The pie charts displayed below were completed by Mark during these sessions.

Mark's belief that he was responsible for the hijacking appeared to be intertwined with his appraisals of himself as being a protector and needing to be in control. As the treatment commenced, Mark reported feeling 100% responsible for the trauma. The basis of this sense of responsibility appeared to be the appraisals mentioned above, or his hind-sight bias. Mark had viewed the hijacking as a situation which could have been prevented if he had acted differently. Following the psycho-education regarding hind-sight bias and the challenging of the peritraumatic appraisals, his share of the responsibility for the hijacking decreased. The pie chart in Figure 6.1 represents this decrease in Mark's sense of responsibility.

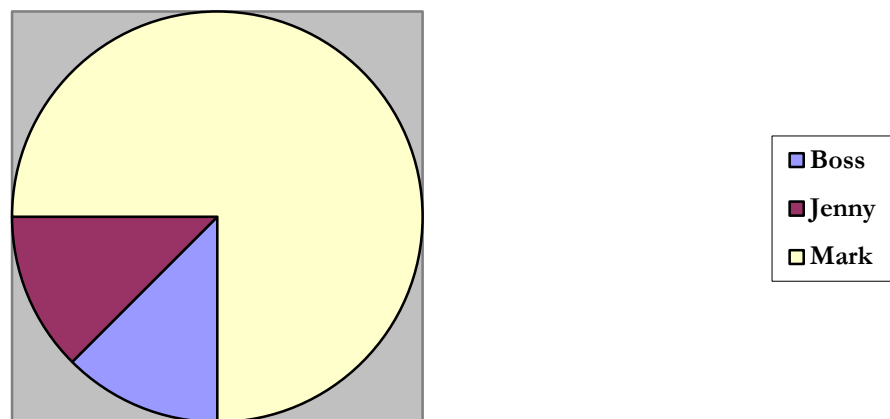


**Figure 6.1: Responsibility pie graph in session 7**

However, as he completed the first pie chart, he became angry and suggested that it was inappropriate for the therapist to ask him to complete a visual representation of the role-players responsible for the event. Exploration of his feelings revealed that he had found it difficult to think that Jenny may have had some responsibility in what had happened the night of the hijacking. He

reported feeling that if he included her in the pie chart, he would be attributing blame to her. He explained that he could not take on all the responsibility as Jenny could have phoned her parents before they had approached her house. He had also viewed his boss as being responsible in part, as his boss had asked him to work late the night of the hijacking. Feelings of guilt were expressed in relation to including these individuals in the first pie chart due to Mark's belief that this suggested that he was blaming others. Mark now shared the responsibility for the hijacking with others. However, his beliefs about the division of this responsibility and the role-players involved still appeared unrealistic and his feelings of guilt would need to be explored further.

Mark's sense of responsibility for the trauma was returned to in the following session. As a realistic division of responsibility would be necessary to facilitate recovery, some time was spent challenging his beliefs about the manner in which he had acted during the hijacking as he still viewed some of his actions as negligent. Following this discussion, he completed a second pie chart (Figure 6.2) as a means of consolidating what had been discussed in the session.



**Figure 6.2: Responsibility pie graph (1) in session 8**

However, the pie chart that had been produced appeared to be in direct contrast to what had been discussed. As can be seen in Figure 6.2, Mark attributed the greater part of the responsibility to himself. The work done in the previous session was reflected on and the therapist acknowledged her confusion about the increase in Mark's sense of responsibility. He explained that although he was aware that others shared in the responsibility, he again found it too difficult to attribute "blame" to others. He expressed his feelings of guilt regarding Jenny's involvement in the hijacking and his

beliefs about women as being vulnerable and weak emerged. Socratic questioning and evidence-based arguments were used in order to challenge Mark's feelings of guilt about the hijacking as well as his perceptions of women. In this regard, some time was spent exploring the origins of these beliefs and links were made between things taking place in Mark's family of origin and his perceptions of women as being vulnerable and weak.

Figure 6.3 below was completed following this exploration. This pie graph saw the introduction of two new role-players. Sandy had resigned from the company in which Mark had worked prior to the hijacking. He explained that if she had still been working in the company, Jenny may not have been with him the night of the hijacking. The hijackers were also attributed some responsibility for the first time. Although a shift had taken place with regard to Mark's sense of responsibility for the hijacking, progress in this regard appeared to plateau for the remainder of the session.

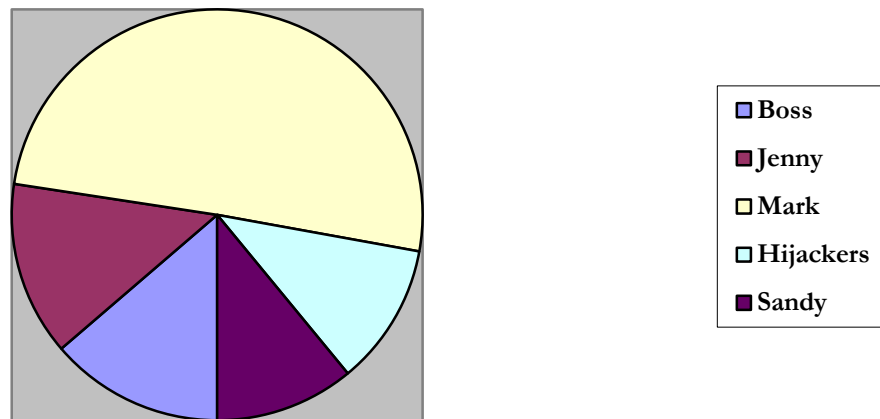


Figure 6.3: Responsibility pie graph (2) in session 8

### 6.5 Identifying Triggers for the Trauma Memory: Session 9

Mark explained that he would find himself feeling particularly anxious at times or experience panic-like symptoms when in the absence of any real threat. He described periods in which he would find it difficult to be around others and would find himself retreating from situations which had previously been enjoyable. However, Mark had also identified images from the traumatic event, such as that of Jenny in the immediate aftermath of the hijacking, which would confront him when he was

in conversation with others. However, as the treatment commenced, he had been unable to identify the actual triggers for these phenomena with any certainty.

The identification of triggers for the trauma memory had initially been discussed in sessions focusing on psycho-education for the experience of PTSD and the imaginal reliving technique. As previous attempts to identify these triggers had been made, the therapist hypothesised that these experiences were due to *affect without recollection* (Ehlers & Clark, 2000), resulting in the decision to engage in a more focused exercise and session to identify these triggers. In order to facilitate the discrimination of the triggers for the hijacking, it was agreed in session 8, that Mark would start a trigger diary. He had a small notepad which he would carry around in his pocket during the day. Each time he found himself feeling anxious or feeling as though he had wanted to escape the situation in which he found himself, he would write down the details of these situations and the symptoms accompanying these. In this manner, the following triggers were identified in session 9:

- Loud noises of any nature
- Women screaming or shouting (even if in positive situations)
- Individuals shouting to each other across a distance

Once the aforementioned triggers had been identified, the link between these triggers and the trauma memory was intentionally broken through a self-instructional process in which Mark would acknowledge that the intrusions and anxiety he was experiencing were not due to the situation at hand, but rather to an event taking place in the past. Although this process required attention and effort initially, it became more natural as time progressed. This process allowed Mark to tolerate circumstances he had avoided prior to the treatment, such as being a part of groups and staying involved in interactions with others that involved the triggers that had been identified.

### 6.6 Further Imaginal Reliving and Cognitive Restructuring to Reduce Intrusive Re-experiencing and Modify Negative Appraisals: Sessions 10 – 12

The second imaginal reliving session had appeared to elicit a coherent account of the sequence of events during the hijacking, as well as more detail regarding the hijackers themselves and one of the critical hotspots. The discussion during and following the imaginal reliving had also appeared to update and elaborate on the trauma memory. However, Mark disclosed in session 10, that he had

felt “shaky” since engaging in the second imaginal reliving of the hijacking. His sleep had decreased to two hours per night and he reported feeling ashamed as both urine and faeces incontinence now characterised his sleep. Other sleep-related difficulties, such as night sweats had also returned, while nightmares had remained absent. Mark’s description of what had been happening at night suggested that he was experiencing night terrors. His experience during the day was not as severe. However, he explained that he felt as though he had been unable to relax and as the night approached, he feared what lay ahead.

The therapist had perceived these reports as being puzzling as firstly, Mark had reported an improvement in his sleep-related difficulties, and secondly, he had waited a week before reporting these problems to the therapist. As Mark’s experience was explored, he reported thinking that the increased intensity of his sleep-related difficulties would be short-lived as it had been discussed during the psycho-education regarding imaginal reliving, that symptoms may initially increase due to the dropping of avoidance mechanisms. He explained that he had become concerned as it seemed as though these problems were not being resolved. However, the therapist wondered whether Mark’s feelings of shame about his incontinence at night had played a role in his decision to wait a week before reporting it her. Furthermore, due to the manner in which he had been trying to hide this from other patients on the ward, it was wondered whether Mark may be concerned that the therapist would inform the nursing staff or the doctors of the level of terror he had been experiencing at night.

The therapist’s confusion and concern about Mark’s experience was shared with the research team shortly after this session. Through the discussion of this phenomenon, it was hypothesised that such an increase in the intensity of Mark’s symptoms was most probably attributed to the activation of a hotspot that needed to be further addressed within the treatment. The level of terror Mark had been experiencing at night was thought of as the degree to which terror is experienced when one is about to die. Due to the level of distress reported for the point at which the hijackers had held the gun to Mark’s head, his own reports of the intrusive nature of this part of the trauma memory, and the point at which these sleep-related difficulties had reappeared, additional imaginal reliving of this segment of the trauma memory was hypothesised to be a possible means of addressing Mark’s experience at this time. The lengths to which Mark would go to avoid his feelings of shame, was also highlighted during this discussion with the research team.

The imaginal reliving of this segment of the trauma memory, or the point at which the gun had been held to Mark’s head, therefore took place in the following session. The short, focused

nature of the imaginal reliving which would be engaged in to address this particular hotspot was discussed. As the imaginal reliving was started, the point at which the gun had been held to Mark's head was passed over rapidly. However, he was brought back to this hotspot as emphasis was placed on reframing this hotspot to include information that Mark knew at the time of engaging in the imaginal reliving as opposed to what he had known at the time of the hijacking, i.e. That he had not been shot during the hijacking and that he was alive, which meant that he had survived the experience. An attempt was also made to link this particular hotspot to other memories for the hijacking and in so doing, this hotspot was contextualised. The short, focused imaginal reliving was therefore used to update and elaborate on this aspect of the trauma memory to place it in context and in the past.

During the discussion that followed the imaginal reliving, Mark's feelings and beliefs about being helpless and worthless were returned to as these seemed to emerge at the point at which the gun had been held to his head. The previous session in which Mark had reported feeling that he had done all he could do during the traumatic event was reflected on and the value of the acts that he had engaged in during the hijacking was emphasised. However, as Mark's feelings of helplessness and worthlessness were challenged through the process of Socratic questioning, a significant turning point in the treatment emerged quite suddenly. Mark explained that he had felt he had protected Jenny during the hijacking as he had been successful in getting the attention of the second hijacker who had been with Jenny while he had been assaulted. He reported that he had, in his own way, protected her and ensured that she had left the experience alive. He reported viewing his daughter's birth two months following the hijacking as confirmation for the fact that he had not died that night. At this point, Mark reported holding the hijackers responsible for his admission to Fort England Hospital. This statement was reflected on as it appeared to emerge quite spontaneously. Although holding the hijackers responsible for his admission to Fort England, he had not been ready to hold them responsible for the hijacking at this point.

Four days following the imaginal reliving, Mark reported the absence of general feelings of shakiness or anxiety. Although the quantity of Mark's sleep increased by only an hour, the incontinence had stopped and night sweats were less frequent. He reported feeling more comfortable and optimistic about his future. In this regard, he revisited his short-term and long-term goals for the future.

## 6.7 Dropping Avoidance Mechanisms: Session 13

Avoidance mechanisms in the maintenance of PTSD were initially discussed as the therapist shared her formulation with Mark in session 1, and were returned to as a rationale for engaging in additional imaginal reliving was provided. Until this point in the treatment, Mark's distressing nightmares, night terrors and the hotspots had been the focus of the treatment. However, he had still been engaging in avoidance mechanisms, suggesting that additional work would be necessary to address these. In addition, his contact with Jenny had increased tremendously and he had been planning his trip to Gauteng for his daughter's birthday. However, aspects of avoidance in his interactions with Jenny were still present. Session 13 was therefore used to explore Mark's avoidance further.

A psycho-educational and exploratory session focusing on avoidance mechanisms was engaged in to facilitate the process of dropping these dysfunctional strategies. The specific avoidance mechanisms that were identified and addressed included:

- Behavioural – avoiding reminders of the trauma such as police-related phenomena and talking to Jenny about the hijacking
- Cognitive – thought suppression, self-punitive thinking and cognitive distraction
- Emotional – substance abuse

Through the discussion of the above mentioned avoidance mechanisms, Mark reported understanding how such behaviours, cognitions and emotions were maintaining the PTSD. However, exploration of the specific issues involved in each of the avoidance mechanisms was engaged in order to prevent further avoidance and generalisation. The appraisals that had formed the foundation for these avoidance mechanisms were therefore challenged and explored in this two hour session, as well as some of the sessions that followed.

### 6.7.1 Behavioural Avoidance Mechanisms

Feelings of shame and guilt, which had initially emerged during the course of the hijacking, had persisted in the aftermath of the trauma and had resulted in Mark avoiding contact with anyone who would elicit these feelings. However, his behavioural avoidance was most evident in his interactions with Jenny and his avoidance of police-related phenomena. While his avoidance of Jenny was

explored in this session, his avoidance of police-related phenomena was returned to in sessions 16 and 17.

Prior to the hijacking, Mark had prominent beliefs about himself as being someone who was not only able to defend himself physically, but was also responsible for the protection of his partner as he had viewed women as being vulnerable and weak. At the outset of the treatment, Mark's feelings of helplessness and worthlessness with regard to the hijacking had been largely due to his perceived inability to protect Jenny during the event. The following beliefs were identified: "If I cannot protect Jenny, she will not want to be with me", "Because I did not protect Jenny, she will no longer feel safe and secure with me", and "I should have been able to protect Jenny". During the months that followed the hijacking, Mark withdrew from his relationship with Jenny. Although they had some contact following the hijacking due to the birth of their daughter in September 2004, Mark avoided asking Jenny about her experience of the hijacking. Mark explained that he had asked Jenny about what had happened to her several times on the night of the hijacking. She had not provided him with any answers on that night, leading him to the assumption that something terrible, such as a rape, must have taken place. Mark had viewed rape as a trauma from which no one would ever be able to recover, leading to his belief "If Jenny was raped during the hijacking, I should have died". The feelings of shame and guilt emerging in Mark's subsequent interactions with her were perceived as confirmation that he could not be with Jenny and resulted in his withdrawal from the relationship.

The uncertainty of what had happened to Jenny the night of the hijacking was hypothesised as being one of the central maintaining factors for the PTSD. Consequently, the need to include her in Mark's recovery was introduced early in the treatment process. As the treatment commenced, it was reported that Mark and Jenny had not spoken for 8 months. However, as the treatment progressed, Mark shared the reason for his admission to Fort England Hospital with Jenny. Although he still found it difficult to ask Jenny about her experience of the hijacking, they spoke on the telephone more frequently and were soon speaking on a daily basis. Mark's contact with Jenny was encouraged and was viewed within the treatment as a means of gaining support for the inaccurate or faulty nature of the appraisals that had emerged as a result of the hijacking. Evidence-based arguments were central in this regard. As Jenny had been making every effort to keep in touch with Mark and kept him up to date with events taking place in their daughter's life in the months that had followed the hijacking, it had been Mark who had not wanted this contact due to his beliefs "she will not want to be with me if I cannot protect her" and "she will no longer feel safe and secure with

me”. As these beliefs were challenged and Mark was able to see that it had been he who had been avoiding Jenny, another significant turning point in the treatment emerged.

Mark had been encouraged to view the recovery process as a means of getting his life back to what it would have been should the hijacking not have taken place. He reported believing that if not for the hijacking, he and Jenny would be married. Although his feelings for Jenny were still present and she had reported still loving him when their contact had increased, he expressed feelings of uncertainty about rekindling the relationship. Jenny was perceived as a reminder of the hijacking and the pain that had followed, as well as the negative thoughts about himself that had been elicited due to the hijacking. Socratic questioning was used to further challenge these negative thoughts and a rationale for engaging in exposure work with Jenny was provided. Mark agreed with the importance of including Jenny in this manner. As Jenny had been planning a trip to the Eastern Cape in order to see Mark, sessions including Jenny were discussed. Further work with Mark’s beliefs about rape was viewed by the therapist as being important at this stage as it was unknown what had happened to Jenny the night of the hijacking.

Entangled in Mark’s avoidance of Jenny, was an avoidance of his daughter, Natalie. Discussion regarding the hijacking elicited a faulty belief that Natalie may not be Mark’s daughter. The hijacking had not only evoked Mark’s fears that Jenny had been raped, but had in some way also elicited concerns that he had not fathered Jenny’s child. The absence of support for this belief and the impossibility that one of the hijackers had fathered Jenny’s child, were central in the challenging of this belief. Through the exploration of his actions during the hijacking, Mark stated that he viewed the situation as one in which he had acted in ways that had ensured his, Jenny’s and Natalie’s survival. He reported initially viewing the hijacking as an event that had not only robbed him of his future, but also one in which he had been the loser. As the session progressed, his views were transformed as he reported viewing the fact that he was still alive as evidence for his victory in the situation and referred to his daughter as the “trophy” confirming this victory.

### **6.7.2 Cognitive Avoidance Mechanisms**

The cognitive avoidance mechanisms that Mark had been engaging in at the outset of the treatment included thought suppression, self-punitive thinking and cognitive distraction. Since being involved in the hijacking in July 2004, Mark had made every effort to “blank out” memories of the event. He had reported that he would not allow himself to think about the hijacking. However, when the

trauma memory had been triggered by something unavoidable, he explained that he would attempt to distract himself by thinking of other things, such as his last conversation with one of his daughters. Already mentioned above, was Mark's belief that he had been responsible for the hijacking and his rationalisation that he had been miserable because he was worthless and helpless. Through the discussion of these avoidance mechanisms, it emerged that Mark had thought he had been doing the "right thing" by not thinking about the hijacking. He had been quite surprised when it had been suggested that he think about whatever it was that came to mind in order to allow the trauma memory to be elaborated on and updated. He initially found this a difficult task and reverted to engaging in these avoidance mechanisms at times. However, as he stayed with the trauma memory when it had presented itself and a reduction in symptoms was noted, Mark found it easier to drop these avoidance mechanisms.

### **6.7.3 Emotional Avoidance Mechanism**

Following the hijacking, Mark had started to abuse over the counter painkillers in order to numb the "emotional pain" he had been experiencing. He described a desire not to feel anything, which had culminated in the suicide attempts. Although others had noticed that Mark had been struggling, he withdrew from everyone as his feelings of helplessness and worthlessness were reported to have been reinforced in his interactions with others. As the emotional avoidance mechanisms were discussed, Mark reported knowing that these had been destructive but explained that he had not known how else to address the anguish he had been experiencing. Due to his admission to Fort England Hospital, he had stopped using over the counter medication and continued to refrain from substance abuse even when leaving the hospital setting for weekends. Consequently, the emotional avoidance mechanisms were reported to be the first and easiest to be dropped.

### **6.8 Further Work on Sleep-related Difficulties: Session 14 – 15**

Although the quality of Mark's sleep had improved, the quantity of his sleep was still of concern as he was managing to sleep only three to four hours a night following the imaginal reliving sessions. However, it was not until this point in the treatment that new information in this regard was disclosed. Mark reported that while in bed at night, he found it necessary to be on guard all the time. In order to prepare himself for danger, he would watch the light beneath the door in order to see if

someone was approaching. When asked what he had been anticipating may happen, he explained that he feared rape and theft. Given that Mark was on Ward A (Neuro) at the time and it was routine practice for the hospital staff to emphasise theft in the ward, Mark's concerns were perhaps in fitting with the context in which he found himself at that point in time. However, theft had not taken place while Mark had been on the ward and his worry about this appeared to be excessive. Furthermore, his concerns about being raped appeared to emerge out of the blue as he reported that these concerns had been present even when not in the hospital setting.

The therapist struggled to make sense of Mark's concerns about rape. However, as he reported these concerns, it was recalled that he had considered rape to be the worst thing that may have happened to Jenny during the course of the hijacking. Exploration of Mark's concerns in this regard revealed that while in the army at the age of 18 years, another soldier had attempted to sexually assault him. While exploring Mark's beliefs about rape, insight was gained with regard to his concerns that Jenny may have been raped during the hijacking as he reported viewing rape as a trauma from which no one would ever be able to recover. The presence of PTSD following Mark's experience in the army was not evident. However, Mark's belief that he would need to be on guard every night in order to protect himself and his partner from being raped appeared to originate from this experience.

Due to the negative appraisals stemming from this experience, attempts to address this experience were incorporated into the treatment plan and took place during session 15. Psycho-education was used in order to highlight the safety-seeking nature of such behaviour and the maintenance of the symptom, or sleep-related difficulties, in so doing. An assessment of whether or not the environment in which Mark had been living and his living arrangements following his discharge from Fort England Hospital took place in order to demonstrate the absence of evidence to support this belief. This investigation highlighted aspects of Mark's environment, such as the presence of security systems, which would be used to challenge his negative appraisals. Covert rehearsal was then engaged in during the session in order to address Mark's belief that he should be on guard each night, as well as to facilitate the development of anxiety management skills. As Mark's bed-time routine was vividly imagined, the therapist reinforced the absence of danger in his environment through the insertion of the information that had been obtained during the assessment of his environment. Following the use of this technique in the session, Mark was encouraged to use covert rehearsal when he found himself feeling anxious before going to bed, as well as to combat anxiety provoking thoughts while in bed at night.

### *6.9 Discharge: Following Session 15*

Mark had been discharged from Fort England Hospital following session 15. He had no longer viewed suicide as an option and had reported feeling in a much better position to address the difficulties that had emerged as a result of the hijacking. As Mark's recovery from the PTSD included a reengagement plan in order to get his life to what it would have been if not for the trauma, it was agreed that more could be done, and recovery would be better facilitated from that point onwards, outside of the hospital setting. During the sessions leading up to his discharge, he was cheerful and positive. Furthermore, his scores on the self-reporting instruments had decreased significantly. The relationships that Mark had formed with other individuals while on Ward A (Neuro) were sustained following his discharge. Furthermore, his relationship with his mother was reported to have improved.

Mark had been spending the weekends leading up to his discharge from Fort England Hospital with his mother. Although he had not shared his experience and his difficulties with her per se, he had made it one of his goals to learn more about his mother so as to understand the impact that her experiences had on him. He had learnt that while a young girl, his mother had been in a children's home. Information such as this was reported to have helped Mark understand why his mother had not been affectionate in his younger years and had related to him in a somewhat detached manner. As the treatment progressed, Mark had been engaging in even more meaningful discussions with his mother. However, as the treatment had not yet been completed at the time of his discharge, it was agreed that Mark would continue the process on an out-patient basis.

### *6.10 Avoidance of Police-related Phenomena: Sessions 16 – 17*

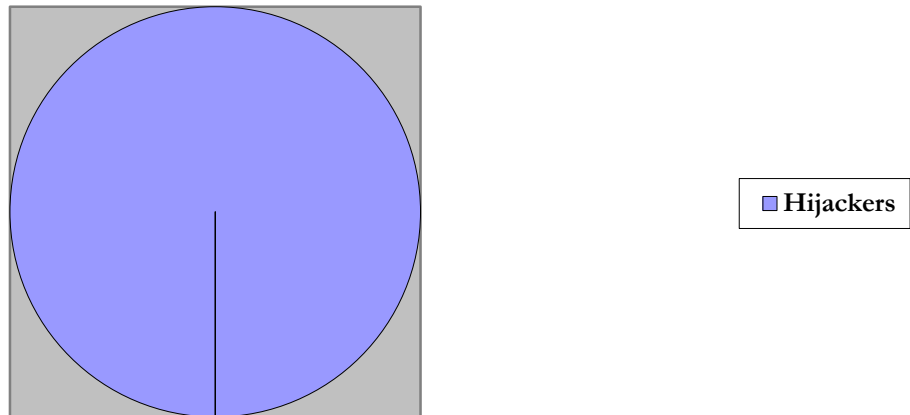
Mark had been of the opinion that the hijackers had been policemen due to the manner in which they had handled the situation and the weapons that had been used. Following the hijacking, he had not seen the hijackers as individuals responsible for their own actions. Rather, he had viewed them as belonging to a larger group, the South African Police Service, which he had viewed as corrupt and abusive. He explained that he would avoid all police-related phenomena as he felt intense feelings of anger towards and dislike for the police service and had been concerned about how he may react if confronted by a policeman, "If you put us both in a cell and locked the door behind us, we would see who walks out alive ...", "My blood starts to boil when I see a cop". The psycho-education

regarding avoidance mechanisms in session 13 had emphasised how such avoidance and intense feelings maintained the PTSD. However, these intense feelings were further explored during sessions 16 – 17.

As the generalisation of “all policemen are corrupt and abusive” and “all policemen hide behind their badges” was explored, it emerged that Mark had another experience with policemen which had given birth to his feelings of anger towards and dislike for the police service. This experience included an arrest with a group of friends for the possession of illegal substances at the age of 16 years. Although the charges had been dropped, he had been detained in police custody for three days. His time spent in the holding cells was characterised by daily assaults from the policemen on duty, as well as feelings of powerlessness, “I was angry ... couldn’t fight back ... nothing you can do about it”. He reported not being able to defend himself and experiencing a sense of entrapment due to the environment in which he had been.

The therapist took time to acknowledge and explore Mark’s feelings in greater depth. A discussion centred on the link between this experience and subsequent experiences involving the police service took place. Mark’s tendency to generalise the behaviour of the policemen involved in his arrest, as well as the feelings elicited from this experience, to other situations was highlighted and challenged. Evidence-based arguments that addressed whether the hijackers were policemen were also engaged in. The idea of the hijackers as individuals, policemen or not, with freedom of choice and responsibility for their actions was introduced and was essential in distinguishing the hijacking from Mark’s earlier experiences with policemen.

This discussion progressed to one in which Mark’s belief that he should always feel and/or be in control was investigated, as both the arrest at age 16 and the hijacking in 2004, had shattered this belief. An inability to control a situation and responsibility if one is not in control was explored. Mark reported feeling that if he were not in control of the situation, which he believed he was not during the arrest and the hijacking, he could not be held responsible for the events taking place at that time. The greatest shift in Mark’s sense of responsibility for the hijacking, and the point at which he was able to attribute 100% of the responsibility to the hijackers, therefore emerged in session 17 during this discussion. Mark stated “it was their decision to do the hijacking” and “they are responsible for their actions”, after which he completed a pie chart (Figure 6.4) in which he attributed 100% of the responsibility for the hijacking to the hijackers. Feelings of excitement filled the room at this point in the session. Mark had not been responsible for the hijacking!



**Figure 6.4: Responsibility pie graph in session 17**

A rationale for engaging in an imaginal reliving session of the arrest at 16 years of age and graded exposure regarding police-related phenomena was provided as a means of further exploring his experience. However, Mark reported feeling reluctant to engage in such techniques due to his concerns about how he may respond in this situation, “It feels like I would want to shoot the bastards”. His reluctance in this regard was normalised and explored. Thereafter, he reported being willing to engage in further sessions addressing the arrest if such work would promote recovery.

### **6.11 Full Circle: Session 18**

Mark had been fully engaging in the sessions following his discharge. He had been meeting with individuals regarding job opportunities and had made enquires into becoming involved at the local gym. He appeared to become increasingly excited at the thought of spending time with Jenny and at the possibility of starting work in a non-governmental organisation in the Eastern Cape. It appeared to the therapist as though he had wanted to make up for the time he had lost within the two years in which he had been disabled by his experience of PTSD. During session 18, Mark reported that he would be going to Gauteng within the week in order to discuss a future with Jenny and to introduce himself to Natalie as her father. Mark’s trip to Gauteng was also focused on introducing Natalie to his two older daughters, as well as making contact with friends he had not seen since moving to the Eastern Cape.

Although his decision in this regard was considered by the therapist to be somewhat impulsive as his planned visit to Gauteng for his daughter's second birthday had been scheduled for two weeks later, it was agreed that the treatment would be completed when Mark returned from his month-long visit to Gauteng. While in Gauteng, Mark was encouraged to speak to Jenny about her experience of the hijacking, as well as to acknowledge the impact that the trauma had on his life and their relationship. Mark would also be revisiting the site at which the hijacking had taken place, thereby extending the treatment process into his visit to Gauteng. Session 18 was also spent exploring Mark's feelings regarding his trip as he had not returned to Gauteng since making the move to the Eastern Cape in the months that had followed the hijacking. Exploration into Mark's experience of PTSD, his mood and his concerns in session 18 revealed:

- Mark reported that his only concern at this time had been the quantity of his sleep. He was sleeping 4 – 5 hours a night. Anxiety-related symptoms, such as sweating and abdominal discomfort, were reported to occur in some instances. However, the intensity and frequency of these symptoms were significantly reduced. Nightmares and incontinence were no longer present.
- Intrusive memories were still present, including the point at which the gun had been held to Mark's head and an image of Jenny sitting against the wall in the driveway following the hijacking. Although these intrusive memories were vivid and were moderately distressing, their frequency was significantly reduced, as well as the here-and-now quality they had initially presented with.
- Feelings of helplessness and worthlessness were significantly reduced. Mark reported feeling excited about reengaging in his life. However, some uncertainty and anxiety was present in relation to his trip to Gauteng as would be expected.
- Although sleep-related difficulties and intrusive memories were still present, the number of criteria necessary to make a DSM-IV-TR (American Psychiatric Association, 2000) diagnosis of PTSD was not met.
- Mark's mood had improved considerably. He no longer met the DSM-IV-TR (American Psychiatric Association, 2000) criteria necessary to make a diagnosis of Major Depressive Disorder and no longer felt that suicide was an option.

The following aspects of the treatment plan were discussed with Mark prior to his departure from the Eastern Cape and will be completed when returns from Gauteng:

- Although exposure work including Jenny would have been initiated, further sessions in which she will be included will take place as she will be returning with Mark to the Eastern Cape.
- Issues arising during the exposure sessions with Jenny will need to be addressed accordingly.
- Further work addressing Mark's avoidance of police-related phenomena, as well as the incident which took place while he had been in the army, is to be engaged in.
- Additional imaginal reliving will be used to address the two intrusive memories that are still confronting Mark. It is hypothesised that further exposure work addressing these hotspots will concurrently address Mark's sleep-related difficulties.
- Interventions specifically targeting any other remaining hotspots will be necessary.
- As Mark's feelings of helplessness and worthless appear to have emerged within his family of origin, developmental work to address his early experiences is indicated and will reduce the risk of relapse.
- Following the planned termination, post-treatment assessment will take place in order to determine whether therapeutic gains are maintained.

The treatment narrative therefore ends at the point at which Mark set off to confront all that awaited him in Gauteng. The treatment had been largely completed at the time of Mark's departure from the Eastern Cape and had resulted in him being back in Gauteng with his partner and his children – he had come full circle and was reengaging in his life.

### **6.12 Interview with Independent Assessor**

The interview with the independent assessor, who was another intern psychologist at Fort England Hospital, took place following session 14. The information obtained during this interview was made aware to the therapist only after Mark's departure from the Eastern Cape. A second interview with the independent assessor will take place after the treatment is completed.

During the interview with the independent assessor, Mark reported finding the treatment process difficult. Particular emphasis was placed on the use of imaginal reliving. In this regard, Mark explained that the process of imaginal reliving had resulted in him remembering things that he

had been trying to forget and he had found that each time he had engaged in the imaginal reliving of the hijacking, additional aspects of the trauma were remembered. Despite the reported anxiety provoking nature of the imaginal reliving, Mark stated that he believed this exposure was facilitating his recovery as the way in which he had lived his life prior to treatment had changed. He provided the example of “always feeling jumpy” prior to the treatment, which was reported to have been alleviated following the imaginal reliving. He reported finding the imaginal reliving beneficial as he had noticed a decrease in the symptoms he had initially been experiencing. Furthermore, he explained that the imaginal reliving was useful in allowing him to differentiate events that had happened in the past to those happening in the present. Mark had concluded that the imaginal reliving of the hijacking he had been involved in two years prior to the treatment had resulted in positive outcomes.

The greatest change that Mark was reported to have observed following the commencement of treatment, was a change in his thoughts. Mark explained that he had noticed that his thoughts had become more positive and he had been able to set goals for his future, which he had found difficult to do prior to the treatment. He had also reported experiencing fewer thoughts about suicide and stated that he found it easier to challenge his thoughts. Also significant, were Mark’s reports of feeling much “calmer” since starting the treatment. Mark explained that he had been of the opinion that things had been worse before he had started to feel better during the treatment process. He had felt more anxious and his panic-like symptoms had increased in the initial stages of the treatment, which is consistent to the documented increase in symptoms in the narrative. However, Mark attributed this initial increase in symptoms to the memories he had been confronting and had explained to the independent assessor that this increase in symptoms was due to his attempts to “stop blocking” the memories that had been confronting him.

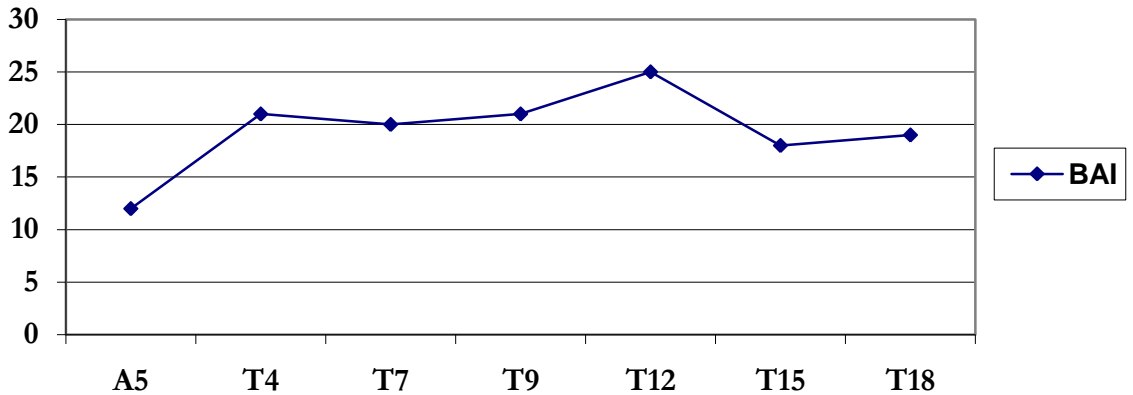
Mark had attributed the changes and the decrease in the symptoms he had been experiencing to the treatment. He had explained that he had always attempted to “block off” everything prior to the treatment but had noticed that “these things” were not affecting his life as much since being involved in the treatment. Furthermore, Mark reported finding it easier to do some work on his own. In this regard, he reflected on the treatment journal he had been keeping and explained that he had found it easier to apply what was discussed in the treatment sessions to everyday situations. He described the treatment process as resulting in “everything coming together” as he was able to notice how things were related due to the treatment. The interview was concluded with Mark stating that he feels “more alive” since being involved in the treatment.

## **7. Therapy Monitoring: Graphical Representation of Repeated Measures**

Figures 7.1, 7.2 and 7.3 below provide a graphical display of Mark's scores of the repeated measures on the Beck Anxiety Inventory (BAI), Beck Depression Inventory II (BDI-II), and the Posttraumatic Diagnostic Scale (PDS). A brief synopsis of the scores on the Posttraumatic Cognitions Inventory (PTCI) and the Trauma-Related Guilt Inventory (TRGI) is also provided, as these two instruments were administered twice during the treatment. The data obtained from the psychometric assessment instruments complements the case narrative and highlights the relationship between Mark's response to the treatment and changes in his mood, emotions and thinking. Scores were collected once during the assessment phase on all instruments and once a week during the treatment process on the BAI, BDI-II and PDS. The interpretations that follow are based on the content of the narrative, as well as on discussion regarding Mark's responses to items on these instruments.

A particularly noticeable feature on all the graphs is a peak in scores during treatment session 12 and a significant decline in symptoms thereafter. This feature coincides with the general feelings of "shakiness" and anxiety Mark had reported following the second imaginal reliving of the traumatic event, as well as the re-emergence of sleep-related difficulties such as the incontinence at night and night sweats. Treatment session 12 addressed the critical hotspot, or the point at which the gun had been held to Mark's head. This was also the point at which he had experienced *mental defeat* (Ehlers & Clark, 2000). The increase in Mark's anxiety related symptoms was hypothesised to have been due to the reactivation of this critical hotspot during the second imaginal reliving of the hijacking. This hotspot was addressed in session 12 with the use of focused imaginal reliving. Cognitive restructuring within the imaginal reliving also took place. In addition, cognitive restructuring and Socratic questioning were engaged in following the imaginal reliving and included a discussion regarding Mark's feelings and beliefs about being worthless and his view of himself as responsible for the hijacking. As these beliefs regarding worthlessness and responsibility were challenged, the significant turning points in the treatment as documented in the narrative emerged.

Figure 7.1: Beck Anxiety Inventory



Mark's scores on the BAI as reflected in Figure 7.1 demonstrate that his anxiety increased as the treatment progressed, which reflects his reported anxiety in response to the imaginal reliving of the traumatic event. Already mentioned, was the decrease in anxiety following further imaginal reliving of the hotspots. Despite the anxiety provoking nature of the imaginal reliving of the hijacking, Mark had reported finding the imaginal reliving beneficial. Although Mark's scores on the BAI in treatment session 18 still indicated a moderate level of anxiety, he reported that following session 12, this anxiety was limited to his concerns about his sleep-related difficulties and was not representative of a chronic state of anxiety throughout the day.

Figure 7.2: Beck Depression Inventory II

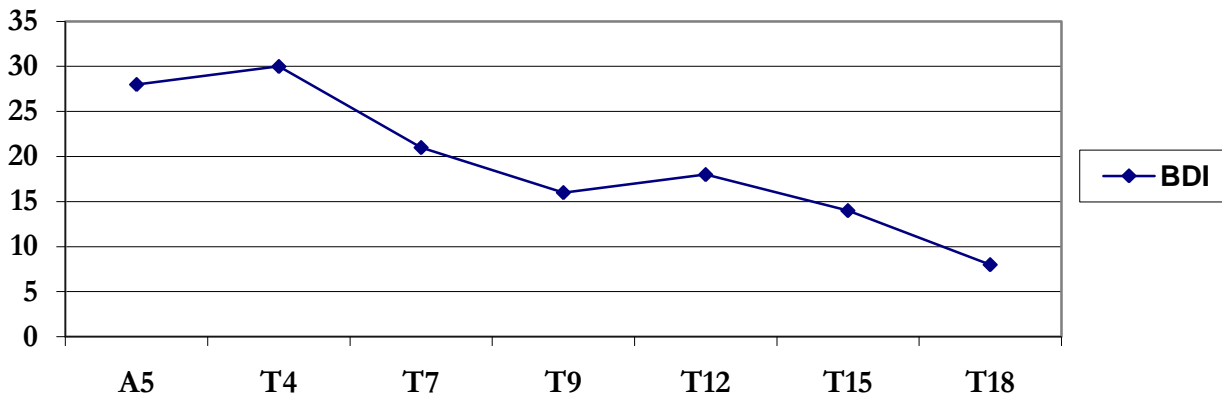
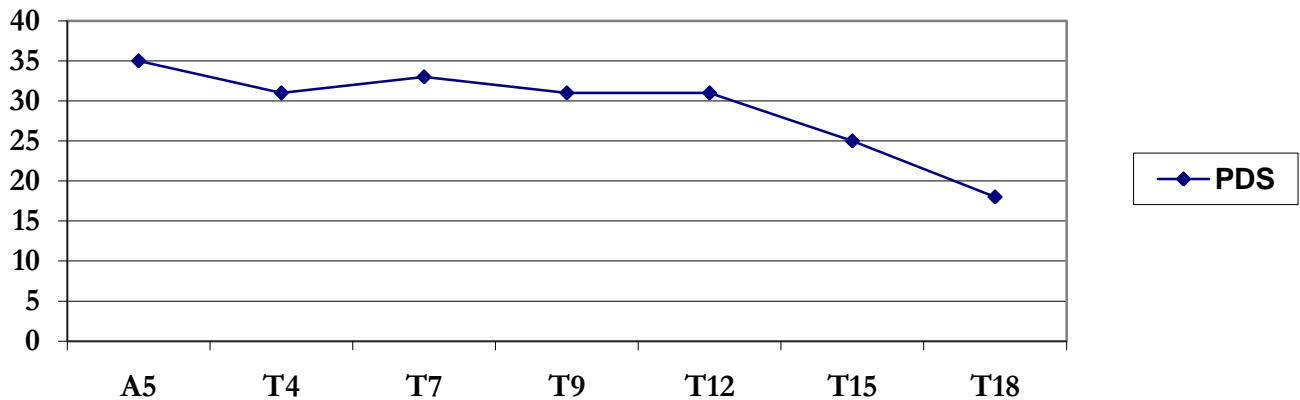


Figure 7.2 displays Mark's BDI-II scores. This graph demonstrates that Mark moved from a position of initially experiencing a severe depression to a state in which depression was minimal. The slight increase in scores in treatment session 4 was reported to have been the result of Mark's adjustment to the hospital setting as he reported finding it difficult to avoid thinking about the hijacking due to the amount of "thinking time" he had while in the hospital setting. The significant reduction in depressive symptoms corresponds with an increased focus on the future as reflected in the narrative and a marked shift in Mark's ability to reclaim his life as the treatment progressed.

**Figure 7.3: Posttraumatic Diagnostic Scale**



The significant decline in Mark's scores on the PDS (Figure 7.3) is indicative of a decrease in post-traumatic symptoms. While his score of 35 on the PDS during the assessment phase placed him in the clinically significant range with regard to his experience of PTSD, his score of 18 in session 18 is within the range of scores obtained for a non-PTSD sample (Foa, 1995). The slight increase of scores during treatment session 7 reflects an increase in intrusive re-experiencing following imaginal reliving. Further imaginal reliving in session 12 resulted in a reduction in intrusive re-experiencing, including Mark's experience of *affect without recollection* (Ehlers & Clark, 2000), as well as reliance on avoidance mechanisms. Mark's scores in treatment session 18 were reported to have reflected his concerns about the sleep-related difficulties he had been experiencing. These concerns had been limited to the quantity of his sleep rather than the presence of other anxiety-related symptoms, such as incontinence, which had been alleviated.

<b>Session Number</b>	<b>Score</b>
Assessment Interview 5	91
Therapy Session 15	117

**Table 7.1: Posttraumatic Cognitions Inventory**

The PTCI was completed once during the assessment phase and again midway through the treatment. Although Mark's score increased on this instrument, the weight given to each item reflected a more realistic assessment of the traumatic event and more adaptive cognitions associated with beliefs and thoughts about the impact of the hijacking and the event itself. The scores on the PTCI are therefore in agreement with Mark's scores on the other instruments and reflect a decrease in maladaptive thoughts and beliefs.

<b>Scale/Sub-scale</b>	<b>Score</b>
Global Guilt Scale	1.75
Distress Scale	1.67
Guilt Cognitions Scale	1.23
Hindsight-Bias/Responsibility Sub-scale	0.71
Wrongdoing Sub-scale	2
Lack of Justification Sub-scale	1.5

**Table 7.2: Trauma-Related Guilt Inventory in Session 1**

<b>Scale/Sub-scale</b>	<b>Score</b>
Global Guilt Scale	1.25
Distress Scale	1.33
Guilt Cognitions Scale	0.86
Hindsight-Bias/Responsibility Sub-scale	0.42
Wrongdoing Sub-scale	0
Lack of Justification Sub-scale	1.5

**Table 7.3: Trauma-Related Guilt Inventory in Session 18**

The TRGI was also completed twice during the treatment. Decreases in scores on most of the scales and sub-scales were evident during session 18, indicating that Mark's trauma-related guilt decreased as the treatment progressed. Particularly evident were decreases on the Guilt Cognitions scale and Wrongdoing sub-scale, suggesting that Mark's appraisals of the trauma and/or its sequelae were more realistic and adaptive in response to the treatment.

In sum, it may be seen from the graphical display that Mark's scores on the psychometric assessment instruments placed him in the clinically significant range with regard to his experience of anxiety and depression during the assessment phase. As the treatment progressed, his anxiety was largely limited to his sleep-related difficulties and he no longer felt hopeless about the future. As this quantitative data is congruent with the qualitative data documented in the narrative, as well as Mark's reported experiences during the treatment, support for the effectiveness of the Ehlers and Clark (2000) cognitive therapy model for the assessment and treatment of PTSD is evident.

## **8. Concluding Evaluation of Therapy Process and Outcome**

The central research questions regarding the effectiveness and the transportability of the Ehlers and Clark (2000) cognitive therapy model for the assessment and treatment of PTSD will be addressed in the section that follows. In so doing, this study will contribute to a rich body of knowledge regarding the transportability of treatment models to the South African context. The discussion will begin by highlighting the aspects of this case-based research which confirm the accuracy of the theory regarding the treatment of PTSD, as well as the practical application of such theory. Treatment effectiveness will be evaluated. Furthermore, the issues surrounding the transportability of the Ehlers and Clark (2000) cognitive therapy model will take into account the contextual factors and practical issues that facilitated and/or hindered treatment effectiveness.

### **8.1. Special Features**

Certain features arising from this case were identified as being either central to the effectiveness of the Ehlers and Clark (2000) cognitive therapy model, or provided points of particular interest when considered in relation to the relevant theory. These features will be discussed in the section that follows.

### 8.1.1 Prescription versus Flexibility

Edwards (2005b) observes that a relevant debate exists in the literature regarding the use of manualised treatments and the possible limitations such approaches may have. Manualised treatments may, at times, provide prescriptive formula as they are applied exactly with little involvement from the therapist (Persons, Roberts, Zalecki, & Brechwald, 2006). This approach results in the treatment becoming inflexible and limited, giving rise to shortcomings in the treatment offered to clients.

A case formulation-driven approach, such as the Ehlers and Clark (2000) cognitive therapy model, suggests that the therapist develops an individualised case formulation for each client, which serves as a guide to treatment planning and the interventions to be used. Case formulation-driven approaches provide the therapist with the flexibility often needed to make intervention decisions guided by the theory and by the results obtained from ongoing assessment, rather than simply by the list of interventions prescribed in many treatment manuals (Persons, 2006).

While manualised approaches typically rely on the use of interventions from just one empirically supported theory, case formulation-driven approaches draw from the interventions included in several empirically supported theories (Persons et al., 2006). In so doing, therapist's using manualised approaches are guided by the manual, while those adhering to a case formulation-driven approach are guided more by principles. Idiographic outcome data, as well as findings emerging in the latest literature, become important for those therapists working from a case formulation-driven approach. Consideration is given to all the treatments the client is receiving in a case formulation-driven approach, such as the effects of medication, rather than only to the interventions administered by the therapist as in most manualised approaches (Persons et al., 2006).

Ehlers and Clark's (2000) cognitive therapy model provides a set of principles in the form of three broad treatment goals and avoids the use of a "cookbook" approach as the case formulation is central and is compiled provisionally during the assessment phase. The treatment is applied in a flexible manner as the case formulation is consulted at each stage of the treatment process and is elaborated on as new information emerges. The relative weight given to the treatment procedures to be used differs from client to client, thereby ensuring that the model is not slavishly applied but meets the needs of the individual client. Cognitive therapy techniques from a range of existing manuals are advocated in addition to several novel techniques.

Evidence for the flexible nature of this model is provided in the narrative. For example, as the treatment progressed additional information regarding past traumatic events was disclosed, rendering it necessary to accommodate these experiences in the treatment plan. Due to the flexible nature of the treatment, this process was done with ease.

### **8.1.2 Mental Defeat**

Ehlers and Clark (2000) have identified a specific frame of mind, referred to as *mental defeat*, which contributes to the emergence of negative appraisals both at the time of the trauma and in the aftermath of the traumatic event. *Mental defeat* describes a perception that one has given up and/or has been completely defeated, and challenges a survivor's sense of worthiness and competence (Ehlers, et al., 1998). Evidence for *mental defeat* is obtained directly from: 1) statements suggesting that the survivor gave up at a certain point during the trauma, 2) descriptions of feeling completely controlled by the perpetrator, 3) descriptions that one had lost a sense of autonomy during the trauma, 4) statements suggesting that one no longer felt like a person during the trauma, 5) a desire for or acceptance of death during the course of the trauma, and/or 6) a response during the trauma which was perceived as defeat (Ehlers et al., 1998).

*Mental defeat* has consistently been associated with persistent PTSD following a trauma (Dunmore, Clark, & Ehlers, 1997, 1999; Ehlers et al., 1998; Maercker, & Boos, 2000) and has been associated with symptom severity in a number of studies (Dunmore, et al., 1999; Ehlers, et al., 1998, 2000). In addition, *mental defeat* may interfere with therapeutic gains being made with the use of imaginal reliving, as imaginal reliving confirmed rather than challenged negative appraisals in some cases (Dunmore, Clark, & Ehlers, 2001). In this regard, imaginal reliving was found to remind the survivor of his/her inability to cope, thereby maintaining rather than changing the survivor's sense of ongoing threat. Addressing these negative appraisals directly in the treatment resulted in positive therapeutic gains being made.

Mark's experience of the point at which the hijacker had held the gun to his head, supports the accuracy of the theory regarding this phenomenon. Mark described this point of the hijacking as the stage at which he felt weak, particularly helpless and ineffectual, and unable to protect himself. He reported no longer caring whether he lived or died. The chronicity of his symptoms, which extended over a two year period, and the severity of his symptoms, such as the experience of night terrors, provides additional support for the aforementioned research findings.

While the narrative describes how the second imaginal reliving contributed to the re-emergence and an increase in the severity of Mark's symptoms, it also demonstrates how further imaginal reliving and cognitive restructuring resulted in positive therapeutic gains being made as has been demonstrated in previous studies. The treatment narrative therefore provides evidence for the presence of *mental defeat* in this case and the need to pay particular attention to such aspects of the trauma memory. Substantial therapeutic gains, such as the reduction in night sweats, as well as the alleviation of anxiety induced incontinence, were achieved as the point at which Mark had experienced *mental defeat* was repeatedly returned to.

### **8.1.3 Affect Without Recollection**

Of particular interest in this case, was Mark's experience of what Ehlers and Clark (2000) have termed *affect without recollection*. This suggests that the re-experiencing of physiological sensations or emotions that were associated with the trauma take place without a recollection of the traumatic event. Mark had reported instances in which he would be talking to others and would quite suddenly be overwhelmed with anxiety, resulting in him withdrawing from the situation without a clear idea of the reason for his response to the conversation. This phenomenon was echoed in the majority of Mark's nightmares. Although his nightmares were reported to have clear themes of violence and typically included Mark either needing to help others, or he himself being in a position of helplessness, the nightmare content had rarely included the hijacking itself. In this regard, powerful physiological responses, such as incontinence, stomach ache and sweating, and emotions, such as fear and helplessness, were elicited.

This case therefore provides particular support for Ehlers and Clark's (2000) concept of *affect without recollection*. These features in Mark's experience of PTSD provide evidence for the poor organisation and elaboration of the trauma memory that lead to poor inhibition of cue-driven retrieval of elements of the trauma memory. Ehlers and Clark's (2000) basic assumption that the trauma memory is problematic in that it has not been sufficiently integrated into autobiographical memory is supported by this case.

### 8.1.4 Anniversary Reaction

The *anniversary reaction* includes a specifically timed, emotionally invested episode, which results in the experience of significant medical and/or psychological symptoms (Morgan, Kingham, Nicolaou, & Southwick, 1998). This experience is suggested to be due to sensitisation following exposure to a traumatic event, the effects of which are experienced each time circumstances reminiscent of the original event occur. The cues or triggers for these *anniversary reactions* may include a variety of factors, such as the age of the client, the date, and/or the nature of the traumatic event. The distress of the client is linked to a specific, previously experienced trauma (Morgan, et al., 1998).

Therapists from different modalities, explain the *anniversary reaction* in different ways. For example, psychoanalytic theory suggests that the *anniversary reaction* involves a reactivation of unresolved conflicts due to loss or separation, which had been successfully defended against and had remained unconscious prior to the point of reactivation (Taylor, 2002).

While the concept of the *anniversary reaction* is not unique to the Ehlers and Clark (2000) model, the Ehlers and Clark (2000) group do make reference to this phenomenon and have found that it occurs in those with persistent PTSD as an aggravation of symptoms around the anniversary of the trauma has been noted in some cases. *Anniversary reactions* are explained by Ehlers and Clark (2000) as a combination of the presence of reminders of the trauma and appraisals of the PTSD symptoms. Ehlers and Clark (2000) explain that those with chronic PTSD may dwell on what their lives were like prior to the trauma. Often external reminders, such as others asking about the trauma, and negative appraisals, such as “I am still not over the trauma yet, I am inadequate”, may be present at the anniversary of the traumatic event.

The serious suicide attempt that had resulted in Mark receiving treatment occurred two weeks prior to the second anniversary of the hijacking. Although his experience prior to this suicide attempt was still that of a post-traumatic response, the symptoms appeared to worsen as the second anniversary of the hijacking closed in. Mark had found it difficult to explain why his symptoms had worsened as he could not identify any precipitating factors that would have resulted in this increase of the symptoms, as well as the deterioration in his mood. However, as the treatment progressed, he reported that Jenny had “reminded” him of the hijacking as each anniversary approached, which had resulted in him thinking how much he had lost as a result of the hijacking.

## *8.2 The Evaluation of the Ehlers and Clark Cognitive Therapy Model for Post-traumatic Stress Disorder*

The Ehlers and Clark (2000) cognitive therapy model serves as both an assessment model and treatment model for PTSD. An individualised version of the Ehlers and Clark (2000) model is developed for each client through a process of identifying the relevant appraisals, memory characteristics and triggers for the trauma memory, as well as the behavioural, cognitive and emotional mechanisms that maintain the PTSD. This process, including the specific treatment plan developed for this case, is documented in the sections addressing the assessment and formulation, as well as the course of the therapy.

### *8.2.1 The Assessment Phase*

A comprehensive assessment phase forms the point of departure for those adhering to the principles advocated by the Ehlers and Clark group (Ehlers et al., 2005). The assessment phase on the whole is geared towards obtaining as much information as is possible about the appraisals of the trauma and/or its sequelae and the trauma memory, in order to formulate the case and develop a comprehensive treatment plan. Several of the techniques that are advocated by the Ehlers and Clark (2000) cognitive therapy model overlap with those that are used in other effective CBT treatment models. However, the way in which the techniques are used differs from how they are used in other models. The aspects of the Ehlers and Clark (2000) cognitive therapy model that distinguish it from other treatments are present from the earliest application of the theory. The assessment phase of the Ehlers and Clark (2000) cognitive therapy model is unique in the line of enquiry it suggests and the use of imaginal reliving within this phase. The model is further unique in the emphasis that is placed on identifying the hotspots, or the parts of the trauma memory that elicit strong distress, during this assessment phase. Imaginal reliving, which is most often used to promote emotional habituation in other treatment models, is used rather to identify the hotspots that will then be dealt with through cognitive restructuring and elaboration on the trauma memory (Grey et al., 2002). Ehlers and Clark's (2000) cognitive therapy model advocates the use of shortened imaginal reliving, which focuses specifically on identifying and rescripting these hotspots. Due to the anxiety provoking nature of exposure work, shortened imaginal reliving is made more manageable and is experienced as less overwhelming than the more traditional use of this technique to promote emotional habituation.

The use of imaginal reliving within the assessment phase, results in therapeutic gains being made early on in the treatment process. As can be seen from the narrative, the work done using imaginal reliving resulted in the significant turning points, both positive and negative, in this treatment. This study provides support for the assumption that imaginal reliving is a powerful and effective technique for the updating of the trauma memory and challenging of negative appraisals of the trauma and/or its sequelae. Further evidence for this point is demonstrated in the relationship between the qualitative aspects of the narrative and the graphs of the self-reporting instruments administered, which display improvements in Mark's mood and a reduction in post-traumatic symptoms in response to further imaginal reliving.

Although the assessment phase is focused primarily on obtaining the fundamental information on which the treatment will be based, this phase was perceived by Mark as the start of the treatment process as he was provided with the opportunity to share his account of the events that took place the night of the hijacking, thereby beginning the process of integrating the trauma memory into autobiographical memory. The nature of the assessment phase itself calls for the dropping of avoidance mechanisms as the trauma is discussed. In so doing, distorted beliefs about the traumatic event are identified and challenged. For example, Mark had been of the opinion that if he did not think about the hijacking, he would be able to forget about the event. The rationale for the treatment, as well as the use of imaginal reliving, provided the information necessary to begin the process of challenging this belief.

### **8.2.2 The Treatment Goals**

The Ehlers and Clark (2000) cognitive therapy model aims to promote recovery from PTSD using three broad treatment goals. Due to the flexible nature of the treatment model, these goals are by no means mutually exclusive and were concurrently addressed in the majority of the treatment sessions included in this case.

#### **A) Modify Negative Appraisals**

The Ehlers and Clark (2000) group place a stronger emphasis on identifying and modifying negative appraisals of the trauma and/or its sequelae than do most other models (Brewin & Holmes, 2003). Expanding on the work of theorists such as Foa and Rothbaum (1998) and Jones and Barlow (1990),

the Ehlers and Clark (2000) group have identified several negative appraisals which are relevant to the development and maintenance of PTSD. These negative appraisals may be focused on the traumatic event, thereby signalling overgeneralisation of danger, and/or may be focused on one's own actions. Other appraisals may focus on the sequelae of the traumatic event.

Whereas some theorists, such as Janoff-Bulman (1992), have suggested that traumatic events shatter previously held beliefs about self and the world, other theorists, such as Resick and Schnicke (1993), have suggested that traumatic events confirm, rather than shatter, previously held negative beliefs about self and the world. The Ehlers and Clark (2000) group propose that traumatic events may both shatter and/or confirm previously held beliefs about self and the world. Mark's negative appraisals of the trauma and the trauma sequelae suggests that his previously held beliefs were both shattered in some instances and confirmed in others, thereby providing support for Ehlers and Clark's (2000) basic assumption of the individual differences in the personal meanings attributed to the trauma and/or its sequelae.

Many of the negative appraisals were identified during the assessment phase in this case as the probe imaginal reliving elicited the hotspots, which included these negative appraisals. The work engaged in during the assessment phase in this regard, complemented the work addressing the negative appraisals during the treatment as discussion regarding the problematic nature of these appraisals took place. Evidence supporting the need to address these negative appraisals is found within the narrative as many of the shifts in Mark's experience of PTSD and major depression were due to the work regarding his beliefs that he was responsible for the hijacking, he could have done things to have prevented the incident, and that he had been unable to protect Jenny, which had resulted in him believing that she would not want to be with him.

Evidence for the value of this broad treatment goal was evident in the collaborative nature of the techniques used. Through the use of Socratic questioning, evidence-based arguments and cognitive restructuring in relation to the imaginal reliving, therapist and client were able to identify alternative interpretations of the problematic appraisals that had been present. However, it had been Mark who had decided on the alternative appraisals that he had found most compelling, which were then inserted into the subsequent imaginal reliving sessions. The techniques used in order to modify these negative appraisals were experienced by the therapist to be empowering for the client. Mark's response to the work addressing these negative appraisals encompassed surprise and excitement at the idea of having so much control over his thoughts and actions, as he had felt helpless and worthless with regard to his situation prior to the treatment.

### ***B) Reduce Intrusive Re-experiencing***

In addition to the standard cognitive therapy techniques that are used, the Ehlers and Clark (2000) cognitive therapy model also employs several novel techniques which are utilised throughout the treatment but are particularly evident when this goal is addressed. These techniques include: 1) stimulus discrimination procedures aimed at reducing re-experiencing symptoms, 2) restructuring within reliving as a means of incorporating new information into the trauma memory, and 3) imagery transformation techniques (Ehlers et al., 2005).

This treatment goal was accomplished as the therapist assisted the client in developing a coherent narrative account of the traumatic experience, thereby placing the series of events in sequence, in context and in the past (Ehlers et al., 2005). This elaboration of the autobiographical memory for the traumatic event is used not only to identify the hotspots as in the assessment phase, and to identify and modify the negative appraisals as suggested by the first treatment goal, but is also suggested by Ehlers and Clark (2000) to inhibit cue-driven retrieval of intrusive memories for the trauma. The narrative documents the use of imaginal reliving to facilitate the reduction of intrusive re-experiencing. Furthermore, following the introduction of exposure work in the treatment, Mark further facilitated this process on his own by visiting the site at which the hijacking had taken place.

Ehlers and Clark's (2000) cognitive therapy model is distinguished from other treatment models in this regard by the manner in which feared and avoided situations are addressed. While other models attempt to promote emotional habituation by repeated exposure, the Ehlers and Clark (2000) group assert that these exercises, including imaginal reliving and revisiting the site, are used to test predictions about overgeneralisations regarding danger, as well as to reduce the here-and-now quality that arises when the trauma memory is activated. The focus of cognitive restructuring within imaginal reliving, therefore falls on the idiosyncratic meanings of the trauma and/or its sequelae that are elicited in the treatment sessions.

### ***C) Drop Dysfunctional Strategies***

In addition to discussing numerous ways in which appraisals interact with the trauma memory, the Ehlers and Clark (2000) cognitive therapy model provides a detailed account of the importance of maladaptive strategies that maintain PTSD. Behavioural experiments in which the maladaptive

nature of these strategies is tested, distinguishes Ehlers and Clark's (2000) model from other treatment models (Brewin & Holmes, 2003).

The application of this treatment goal was perhaps the most difficult in the case of Mark. Psycho-educational sessions regarding the maladaptive nature of these strategies were provided and the emotional and behavioural avoidance mechanisms were easily relinquished. However, the cognitive avoidance mechanisms were not as easily dropped. This was accomplished only as Mark experienced a decrease in post-traumatic symptoms. Mark was therefore able to gain evidence to support the idea that as the trauma memory is addressed, thereby integrating it into autobiographical memory, fewer re-experiencing symptoms are experienced.

### 8.2.3 Frozen in Time to Reclaiming One's Life

Clinical contact with the referral agent, as well as the referral letter accompanying Mark to Fort England Hospital, yielded information that had been largely in line with the information revealed during the screening interview and provided further support for the extent to which Mark had been disabled prior to the treatment. As the process of piecing Mark's story together progressed during the assessment phase, it became clear that he was experiencing a state referred to by Ehlers and Clark (2000) as being *frozen in time*. He appeared to be unable to resume the life he had been living prior to the hijacking, but had also been unable to start a new life or form lasting relationships following the hijacking. Mark had essentially been completely disabled by his experience of PTSD for a period of two years. Ehlers and Clark (2000) describe this phenomenon as occurring when clients with PTSD feel disconnected from their former self, as well as their life goals. This state of being *frozen in time* originates from three sources: 1) appraisals of the trauma and/or the trauma sequelae, 2) a sense of being disconnected from current reality due to repeatedly re-experiencing the sensations and emotions that were present at the time of the trauma, and 3) avoiding or giving up activities that were engaged in prior to the trauma, resulting in a sense that one is trapped in the time period in which the trauma took place (Ehlers & Clark, 2000).

Although the aforementioned treatment goals were considered throughout the assessment and treatment process, the overarching goal in this case included the need for Mark to reclaim his life. The treatment goals address the sources which result in those with PTSD feeling disconnected from their experiences. However, the Ehlers and Clark (2000) cognitive therapy model encourages the client to engage in active strategies to reengage in the world around them and in so doing, reclaim

parts of their former self. A unique aspect of the Ehlers and Clark (2000) model is therefore including the client's external world in the treatment in addition to addressing the internal components that serve to maintain the PTSD.

It was hypothesised that should Mark be able to reclaim his life following treatment, evidence for the effectiveness and the transportability of the Ehlers and Clark (2000) cognitive therapy model for the assessment and treatment of PTSD would be provided. The narrative demonstrates that Mark was able to move *from a position of being frozen in time to beginning the process of reclaiming his life* within 8 weeks of treatment. Although the treatment plan was not implemented in its entirety, the treatment was more or less complete at the time of Mark's departure from the Eastern Cape. It would perhaps have been more beneficial should the treatment have been completed prior to his visit to Gauteng. However, this very visit was viewed as a part of the treatment as Mark not only revisited the site at which the hijacking had taken place, but also met with Jenny and his daughter with the confidence to confront whatever issues would arise. This exposure work which was initially included in the treatment plan thus did take place but was facilitated by Mark's own initiative. Telephonic contact with Mark following his arrival in Gauteng, suggested that he had been able to engage in this exposure work and he had reported feeling happy and well.

In conclusion, the narrative provides evidence for the treatment being responsible for the marked improvement in the experience of PTSD in this case. The causal relationship between the qualitative aspects of the case narrative and scores represented in the graphs of the self-reporting instruments provides additional evidence for Mark's improvement and the changes taking place in his life in response to the treatment.

### **8.3 The Transportability of the Ehlers and Clark Cognitive Therapy Model**

Research on the transportability of treatment models is an essential and distinctive area of research (Edwards, 2005b). However, relatively little research regarding the transportability of the Ehlers and Clark (2000) cognitive therapy model has been published to date. Already mentioned in the section addressing the transportability of treatment models in the literature review were the studies conducted by Gillespie et al. (2002) and Davidow (2006). Both these studies used Ehlers and Clark's (2000) model in the treatment of trauma survivors. Gillespie et al. (2002) demonstrated that the treatment intervention using the Ehlers and Clark (2000) model had been both effective and transportable. However, this study was markedly different in research design to the current study.

Davidow's (2006) work, which used a case-based research design, highlighted the effectiveness and the transportability of the Ehlers and Clark (2000) model on all dimensions. The model was successfully transported to a clinical setting in the treatment of a Xhosa-speaking individual in the South African context.

The discussion above regarding the effectiveness of the Ehlers and Clark (2000) cognitive therapy model in the treatment of a hijacking survivor contributes to the evidence for the transportability of this model to a clinical context and in the treatment of a South African individual. Although the effectiveness of the Ehlers and Clark (2000) cognitive therapy model in the assessment and treatment of PTSD has already been emphasised, certain contextual factors specific to this case may have impacted on the transportability of the model. These factors include: 1) the occurrence of the trauma two years prior to the commencement of the treatment, 2) the impact of the inpatient setting on the treatment process, and 3) practical issues, such as the need to reduce the suicide risk in Mark's case. As an aim of this study is to investigate the contextual factors which may have had a bearing on the transportability of the Ehlers and Clark (2000) cognitive therapy model, these factors will be discussed in the section that follows.

Ehlers and Clark's (2000) cognitive therapy model does make provision for the delayed onset of PTSD in some cases and provides insight into why symptoms may develop months or even years following the traumatic event. However, in this case the onset of PTSD appeared to manifest sharply after the hijacking. The delay occurred in the treatment received rather than in the onset of the PTSD. This delay in treatment appeared to be due to the interplay of factors such as Mark's appraisals surrounding the hijacking, such as "The hijacking was my fault, I could have prevented it from happening", others' reactions to his involvement in the hijacking which appeared to be characterised by apathy, and Mark's response to his post-traumatic reaction, which he believed he should have been able to control. Mark had essentially been disabled for a period of two years prior to the treatment. Although others had noticed a deterioration in Mark's functioning following the hijacking, it had only been when he had engaged in a serious suicide attempt that he had received "permission" to feel the anguish he had been experiencing as a result of the hijacking.

While the chronicity of Mark's post-traumatic symptoms provides support for the unlikelihood of spontaneous recovery, and the substantial improvement in the PTSD and his mood within 8 weeks highlights the effectiveness of the treatment offered, the two year period between trauma and treatment is hypothesised not to have had any bearing on the treatment. During the assessment phase, it was thought that this delay in treatment may have resulted in it being more

difficult to treat the post-traumatic symptoms and would result in a longer treatment period. However, the substantial improvements occurred within only 8 weeks, thereby providing evidence to the contrary of this initial hypothesis. It is therefore unfortunate that Mark had been disabled by his experience of PTSD for two years before receiving treatment.

Already mentioned was Mark's referral to Fort England Hospital by a clinical psychologist due to his suicide attempt. If not for his admission to Fort England Hospital Mark may not have received the treatment necessary to facilitate his recovery from PTSD. The inpatient setting is therefore hypothesised to have played a role in Mark's recovery. While in hospital Mark had been involved in group therapy processes 4 times per week, including occupational therapy groups, social work groups and psychology groups. Although the groups did not address Mark's experience of the hijacking or the PTSD, and it was reported by other professionals that his participation was minimal, the groups did appear to normalise psychological disability as a result of a variety of situations, thereby addressing some of Mark's negative appraisals, such as "I should be able to control myself at all times". Furthermore, Mark was taken out of the environment he had been living in, which allowed him the opportunity to focus entirely on his recovery. The limited resources at the hospital were advantageous in this case as Mark was confronted with lots of "thinking time". This was reported to have been the hardest for him as he struggled to avoid thinking about the trauma, which is what was called for to promote recovery. The setting therefore promoted the dropping of avoidance mechanisms. As Mark had little support outside of the hospital setting, his admission had resulted in the need for those around him, specifically his parents, to acknowledge the severity of the situation, as well as Mark's painful experiences. This emphasised the need to have an adequate support system outside of the hospital setting. Finally, the hospital setting allowed Mark to be in a safe environment and to meet others who he could rely on for support, thereby placing him in a better position to engage in the treatment.

Practical considerations were also present with regard to admitting Mark to Fort England Hospital. As Mark had been a suicide risk, he was placed on suicide watch. In addition, Mark's inpatient status resulted in the therapist being able to see him three times a week and after hours if necessary. As Mark had not lived in Grahamstown, he may not have been able to engage in three sessions a week, which may have resulted in the treatment being extended over a greater period of time. As he had been disabled for a significant period of time prior to treatment, the intensive nature of the treatment had been in his best interests. Furthermore, Mark had been depressed and lacked motivation prior to his admission, which suggests that he may not have participated in the treatment

if it entailed travelling. For the purposes of this study, the inpatient setting was therefore seen to compliment the initial stages of the treatment. In conclusion, this study provides support for the transportability of the Ehlers and Clark (2000) model not only to a clinical setting and in the treatment of a South African individual, but also to an inpatient setting.

## **9. The Way Forward**

The aim of this research study was achieved by providing support for the effectiveness and the transportability of the Ehlers and Clark (2000) cognitive therapy model for the assessment and treatment of PTSD. Furthermore, the contextual factors which were important in this case were investigated and documented. However, research within the social sciences will inevitably produce various limitations due to the unique individuals and dynamic phenomena that are studied. Perhaps the greatest limitation yielded by this study, is the generalisability of the findings. The documented findings arising from this case-based research are unique to the context in which they were revealed. However, the nature of case-based research calls for the generalisation of data based on the replication of the results on a case-by-case basis. The conclusions reached in this study may therefore contribute to a database of rich knowledge regarding the transportability of treatment model to the South African context, thereby making the findings more generalisable. Also taken into consideration, is the culture and race of the client. Research investigating the transportability of the Ehlers and Clark (2000) cognitive therapy model with clients who are culturally and racially diverse would further contribute to this essential and distinctive area of research.

As an intern psychologist, I find myself at the forefront of my professional development and have learnt a great deal not only from interrogating the literature regarding a proven treatment for PTSD, but also in the application of this theory in this case. As the assessment process commenced, I had been anxious about the treatment that lay ahead as this had not only been my first experience with the Ehlers and Clark (2000) model, but had also been my first therapeutic experience with a hijacking survivor. However, due to the flexible nature of the model and the comprehensive literature that exists regarding this model, there were very few “mistakes” that could have been made. Due to my own level of excitement at Mark’s ability to reclaim his life, as well as the user-friendly nature of the literature regarding the Ehlers and Clark (2000) cognitive therapy model, I look forward to the next client I am able to assist with the use of this model. Mark’s ability to reclaim his life has been an empowering journey for both client and therapist.

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## Appendix A: Consent Form



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### CONSENT FORM

I, \_\_\_\_\_, consent to engage in the therapeutic process and research study with Tracy-Ann Smith in the treatment of Post-traumatic Stress Disorder.

I understand that:

1. The researcher is an Intern Clinical Psychologist conducting research as part of the requirements for a Masters Degree in Clinical Psychology at Rhodes University
2. The treatment I will receive will form part of a larger project and will contribute to a larger case series aimed at identifying effective treatments for people who have experienced trauma
3. The sessions will be audio-tape recorded and may be listened to by other psychology professionals bound by the standard regulations of confidentiality
4. I understand that my participation in the research will not compromise the therapeutic process and professional standards of my therapy
5. When the research is published, I understand that a pseudonym will be used and all identifying details will be changed in order to protect my anonymity
6. As I am helping to add to the body of clinical knowledge by participating in the treatment, all the services offered by Tracy-Ann Smith will be free of charge
7. I am free to withdraw my consent to participate in the treatment at any time but understand that any data collected will form part of the research study
8. In the event that consent to participate in the treatment is withdrawn, I will have an interview with the researcher/therapist explaining my reasons for this withdrawal

Signed,

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Client/Research Participant

Date: