

**PATTERNS OF CONSTRUING
AND
POST-TRAUMATIC STRESS DISORDER**

CHRISTOS SERMPEZIS

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Dedicated to my parents:

Στέργιος *and* Όλγα

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Abstract

Four studies were conducted in order to investigate the way people construe their most stressful and traumatic experiences. Personal construct theory was the main theoretical approach used in all studies but the thesis also drew upon social constructionist perspectives.

In study one, a clinical sample of people diagnosed with PTSD ($n = 36$) was tested using repertory grids and questionnaires. The study tested the viability of the personal construct model of PTSD (Sewell et al, 1996). Results did not support the model and a new personal construct model was proposed.

In study two, an investigation into a number of methodological issues relating to the hierarchical-classes analysis (HICLAS), as applied to PTSD conceptualizations within the personal construct model, was conducted. Results revealed that its use in the analysis of repertory grid data was based on flawed assumptions. Corrective suggestions were proposed and the TUCKER-HICLAS software was introduced in order to improve the analysis of repertory grid data.

In study three, a student sample ($n = 114$) was divided into groups according to some personality traits (high/low anxiety, repression, dissociation, thought suppression). The students completed repertory grids using as elements life events, including the most stressful event of their lives, and consequently their patterns of construing these events were compared between them as well as with the patterns found among the PTSD patients from Study One. Results were counterintuitive in the sense that it was found that the low anxious group was the most similar to the PTSD group. A model based on the concepts of anticipation and epistemic control was proposed to account for the findings.

In study four, an asylum seeker and refugee sample ($n = 5$) diagnosed with PTSD was interviewed and asked to complete repertory grids. Results showed that this population tends to construe their traumas in terms of constructs expressing social relations rather than psychological states, as commonly found among non-refugee people. Central to their construing of trauma was found to be the concept of "limbo". The psychosocial effects of limbo were explored through the anthropological concept of liminality. It was proposed that issues of functionality should be incorporated into the diagnosis and treatment of trauma among asylum seekers and refugees as well as the general population.

Chapter One: General Introduction

1.1. An overview

This thesis set out to investigate the way people diagnosed with post-traumatic stress disorder (PTSD) as well as normal individuals construe their most stressful or traumatic experiences. The investigation proceeded in the way described below.

In Chapter One a historical account of the concept of psychological trauma along with the main models of post-traumatic stress disorder is presented. The purpose of this account is to place PTSD within a historical context and to discuss its paradigmatic development within the disciplines of psychiatry and psychology in regard to socio-political and cultural influences.

Chapter Two reports a study in which a clinical sample of people diagnosed with post-traumatic stress disorder was assessed with the purpose of testing out the personal construct theory model of the disorder (Sewell et al, 1996). In the context of the same study, changes in construing occurring as the result of psychotherapeutic treatment were assessed in a number of participants.

In Chapter Three the hierarchical-classes analysis model (HICLAS; De Boeck & Rosenberg, 1988) is explored in order to test whether its application in the analysis of repertory grid data is methodologically appropriate.

Chapter Four reports a study in which a student sample, consisting of several groups characterised by different personality traits, was tested in order to examine differences in the way stressful events were construed among them. Comparisons were made between the types of construing used by the different student groups and the PTSD sample described in Chapter Two. The main purpose of this comparison was to investigate patterns of construing among psychologically healthy individuals that might act as antecedents to the development of PTSD following a traumatic encounter.

Chapter Five reports an investigation of an asylum seeker and refugee sample which explores whether patterns of trauma construing could vary among different types of traumatic experiences and populations.

In Chapter Six the main findings of the thesis are presented and comparisons are drawn between the different studies. Also, a synthesis of the findings is proposed in

conjunction with its clinical implications. Finally, the limitations of the thesis are presented along with suggestions for future research in the field.

1.2. What is Post-traumatic stress disorder (PTSD)?

The use of a question format to entitle this section is deliberate. It is intended as an allegorical act that seeks to convey, right from the start, the notion that PTSD remains, still today and after over two decades from its initial introduction within the psychiatric nomenclature (DSM-III, American Psychiatric Association, 1980), an open question. Trauma research, as will be shown, has so far generated more questions than provided answers to the chronic issues surrounding the understanding and conceptualisation of the effects of traumatic experiences on people's lives.

The provision of a historical account of trauma studies that took place within western Europe and the United States, dating back from the last quarter of the nineteenth century, has become something of an institution within the PTSD literature. These accounts are usually given, with few exceptions (see, for example Young, 2000), without a rationale and in an uncritical and routine manner which tries, in a sense, to "fill the gap" for the years preceding the introduction of the diagnostic term within the DSM. Here, the reasons for such a retrospective view will be made clear right from the beginning as such a historical presentation is thought to be central to the understanding of the PTSD diagnosis, which until today has been regarded, among other things, from controversial (Mezey & Robins, 2001; Sullivan & Gorman, 2002) to inadequate (Becker, 1995).

Inquiring into the historical origins of PTSD will allow us to broaden our perspective to such an extent as to be able to see how a combination of a specific course of scientific research and certain socio-cultural dynamics together can produce some unique form of psychiatric discourse. It is certainly the case for most scientific constructs, independently of discipline, that they develop in what modern historians of science, notably Kuhn (1962), have come to recognize as paradigmatic shifts (Kudler, 2000). Paradigms are sets of assumptions, shared by groups of scientists, which tend to change over time.

The concept of PTSD has been through a number of such paradigmatic shifts or cycles since 1880 when a neurologist named Oppenheim coined the term posttraumatic

neurosis or even earlier in 1878 when Eulenberg introduced the concept of “psychic trauma” (van der Hart & Brown, 1990). Scientific inquiry alone cannot account for the whole picture though as this does not take place in a vacuum. Socio-cultural developments are always inextricably involved in the shaping of scientific practice as well as in the creation of specific conceptions of subjectivity and selfhood.

In that sense the diagnostic category of PTSD is not a scientific “discovery” but rather the culmination of a process that lasted over a century and in which at least three kinds of factors interacted together for its establishment. In the order that they are going to be presented here these factors are: i) specific paradigmatic lines of inquiry taking place within the scientific discourse of psychiatry since the end of the nineteenth century ii) socio-political developments taking place mainly within western Europe and the United States, where most of the research into the psychological effects of trauma has taken place and iii) cultural definitions of subjectivity and selfhood evolving within and during the aforementioned time and places. Although these factors are mentioned here as relatively well defined and separate entities it should be noted that this has been done only for the purpose of analysis and presentation. In reality all three factors consist of an intertwined nexus the components of which can only be hinted at by analytic speculation.

1.2.1. Paradigmatic cycles in trauma research.

Although several changes have been made in the diagnosis of post-traumatic stress disorder since its introduction in the third edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1980), its basic structure nevertheless has remained more or less intact with its four main criteria. Criterion A, that is the doorkeeper of the diagnosis, refers to the existence of a recognizable stressor. Criterion B includes symptoms related to the reexperiencing of the trauma. Criterion C contains the numbing of responsiveness to or reduced involvement with the world. Finally, criterion D describes a miscellaneous number of symptoms which include increased arousal, survival guilt, avoidance of reminders of the traumatic event and intensification of symptoms upon exposure to events or situations symbolizing or resembling the initial trauma.

As with other classifications in DSM-III the PTSD diagnosis was constructed in its algorithmic form for the purpose of differential diagnosis and without the

pretension of being exhaustive of all possible symptoms that a trauma victim might have suffered (Wilson, 1994). The aforementioned criteria are a very rough description of PTSD diagnosis, which intentionally ignores any detailed specifications and all the changes that have been made to them since 1980, as the sole purpose at present is to provide a starting point for a historical account of the core concept of PTSD within Western psychiatry.

Although the psychological effects of traumatic experiences have been well documented throughout history, their pathogenesis became the object of systematic scientific research only since the second half of the nineteenth century. The first phenomenological account of PTSD symptoms dates back 4,000 years, when Elamites and Sumerians attacked the city of Ur and destroyed it (Ben-Ezra, 2002). Similar psychological reactions to war atrocities have also been recorded in Homer's *Iliad* and Shakespeare's *King Henry IV*. Traumatic reactions are not limited to war atrocities though, but can also be produced as a result of accidents, natural or man-made. The mentioning of the Great Fire of London in 1666 and the railway accident at Staplehurst in Kent in 1865, as described by Samuel Pepys and Charles Dickens respectively, are commonplace references of graphic descriptions of post-traumatic symptomatology within the PTSD literature.

Scientific inquiry into the etiological basis of post-traumatic reactions seems to have started as a clash between organic-neurological and functional-psychological accounts. Among the various names that the post-traumatic syndrome has assumed during the early days of investigation are the terms "railway spine" or else "concussion of the spine", introduced by Erichsen in 1882, and "shell shock", coined by Mott in 1919, which both represent the organic-neurological approach. According to the latter, post-traumatic symptoms were the direct result of certain injuries of the spine and physical lesions of the brain in the railway spine and shell shock conceptualisations respectively. This approach, which was the majority view, gained widespread recognition and the term "railway spine" became part of medical terminology. As Trimble (1985) mentions, a consultant physician from Chicago named Clevenger even wrote a book on the subject, which was subtitled "Erichsen's disease" and published in 1889, thus further supporting neurological causation.

In parallel to those neuro-anatomical accounts there seemed to be a line of research that started in the 1850s in France and put emphasis on the psychological mechanisms of traumatization. This research inquired into the sexual abuse of children

and soon made connections between childhood histories of trauma, “hysteria”, and multiple personality disorder (van der Kolk et al, 1994). These relationships were examined more fully during the last two decades of the nineteenth century by the French neurologist Charcot who was interested in the effects that mental processes had on behaviour. His student, Pierre Janet, was the first to study in particular the association between traumatic experiences and mental illness.

Janet’s emphasis was on the role that traumatic memories played in the integration of frightening or traumatic experiences into the cognitive schemata of patients. He claimed that inability to integrate traumatic memories may result in the non-assimilation of new experiences and that leads very often to those un-integrated experiences splitting from conscious awareness. Janet called this splitting phenomenon dissociation and saw it as a coping mechanism that helped people to deal with stress but also as an etiologic factor involved in the pathogenesis of traumatic reactions. Janet also hinted to possible physiological components of trauma when he remarked that through the mechanism of dissociation traumatic memories could split from consciousness and be stored instead as visual images (in the form of flashbacks or nightmares) or as visceral sensations expressed in psychological symptoms of anxiety and panic (van der Kolk, 1996). The idea of traumatic memory, its physiologic basis, and the phenomenon of dissociation are surprisingly modern and continue to shape our understanding of the nature of trauma.

As contemporary studies have shown, dissociation is a common reaction among traumatized populations and it might be involved in the pathogenesis of PTSD as an etiological factor (Classen, Koopman, & Spiegel, 1993). The fact remains nevertheless that at the time Janet’s ideas were not acknowledged by the psychoanalytic approach that followed immediately afterwards (Lamprecht & Sack, 2002). It was only almost a century later that Janet’s work was rescued from oblivion by the contemporary trauma researchers van der Kolk and van der Hart (1989) and was also included in the seminal work of Mardi Horowitz (1976) that combined Janet’s and Freud’s ideas.

As psychoanalytic ideas started developing for the first time at Charcot’s clinic of the Salpetriere, Freud adopted most of them on his visit to the hospital in 1885. In his writings from 1892 to 1896 Freud was following Janet on all of his major points on trauma. Specifically, Freud shared Janet’s central idea that affectively charged events contained within the subconscious were encoded in an altered state of consciousness. It was exactly because of this altered state of the way in which the encoding took place

that traumatic experiences remained unintegrated. Freud agreed once more with Janet that these unintegrated, or else, mute and unsymbolized experiences were the determining factor in the repetition or reliving of trauma through dreams and flashbacks (van der Kolk, Herron, & Hostetler, 1994). Even more fundamental was the conviction of both researchers that traumatic symptomatology was functional in nature which made a paradigmatic shift away from the then contemporary organic-somatic theories of trauma mentioned earlier on.

This is however as far as the agreement between the two thinkers goes since Freud began developing the notion of “repression” in his Aetiology of Hysteria, written in 1896, replacing thus Janet’s concept of dissociation. This change also marks the point where Freud seemed to have abandoned his so-called “Seduction Theory” of hysteria which had been his original thesis on the matter and in which dissociation was the prominent explanatory pathogenic process. The main difference between the two concepts is that dissociation explains trauma as the result of an actual event that took place during a dissociated-altered state of consciousness and for that reason remained outside the conscious awareness, or the ego, in psychoanalytic language. On the other hand repression is referring to the mainly unconscious suppression of instinctual wishes. The repercussions of preferring the latter as an explanatory mechanism was an emphasis, from the part of Freud and of psychiatry in general, on people’s premorbid personality characteristics and to a large extent the abandonment of the idea that external reality can be the major cause of psycho-pathological states.

This seems to be the common path that the majority of historical accounts appear to be following when they attempt to explain the evolution of ideas on trauma up until the time of Freud. This account is however at best a quite crude description of Freud’s position as it seems to ignore two very important issues. The first is the fact that Freud’s theories evolved almost constantly and that holds true of his theory on trauma. Moreover, despite further elaborations, Freud’s theory of neurosis remained throughout a post-traumatic one. The second issue concerns the so-called historicity of concepts, in other words, the fact that the meaning of concepts change over time and that should apply to the contemporary concept of PTSD and its historical equivalents in the past. What this analysis will try to show is the existence of a misconception that runs throughout the literature and seems to spring from the otherwise implicit equation of the concept of hysteria with the contemporary concept of PTSD.

Regarding the first point, Freud talked about trauma since his *Studies on Hysteria* (1957) with Breuer when they conceptualised hysteria as a symbolic representation of memories of traumatic events. The recognition of trauma as something imposed by external reality and being a causative factor of subsequent psychopathology had been a constant theme in Freud's writings. What has been attached to him by modern historians, namely the abandonment of his seduction theory and his emphasis instead on the role of fantasy in intrapsychic processes, seems to derive from an oversimplified interpretation of a much quoted passage from his *Introductory Lectures*. This passage reads: "It will be a long time before [the patient] can take in our proposal that we should equate phantasy and reality and not bother to begin with whether the childhood experiences under examination are the one or the other. Yet, this is clearly the only correct attitude to adopt towards mental productions. They too possess a reality of a sort". (1966, p. 368)

The interpretation of the above formulation in the literature usually takes an "either-or" form in which phantasy is regarded as being the part most favoured by Freud and thus minimizing the external, or else, event-based experiences of people (Wilson, 1994). This however is not the only possible reading of what Freud wanted to convey and there is certainly a more plausible interpretation when we take into consideration both, his later writings on trauma as well as the socio-political forces which were shaping professional practices and social attitudes at the time of his publications. If we pay close attention to the aforementioned passage Freud clearly seems to talk about the equation of phantasy and reality rather than arguing for one or the other. Certainly his thought goes beyond a simple dichotomy and what seems to suggest is rather what a more contemporary term would describe as a constructivist position. What is meant by the latter is that neither the external reality nor the thoughts or the phantasies of people take precedence. What takes place in peoples' minds is a constant interpretation of external reality as well as internal states and that is almost always the only reality in which people live their everyday lives. The constructivist view of trauma will be presented analytically in the following chapters of this thesis.

As mentioned earlier, going beyond a simplistic "either-or" interpretation helps us to explain Freud's later writings on trauma. If Freud had actually abandoned his so-called seduction theory in his *Introductory Lectures*, written in 1917, we would rather expect any mentioning of trauma to have considerably subsided or even disappear from his work in later years. Nothing however could be more distant from the truth when we

see that even in his *Introductory Lectures* Freud wrote that “Traumatic neuroses are not in essence the same thing as the spontaneous neuroses which we are in the habit of investigating and treating by analysis” (pp. 274-275). Also, at the proceedings of the Fifth International Psychoanalytical Congress, in 1918, Freud further elaborated on the difference between the two conditions by noticing that “In the traumatic and war neurosis, the human ego is defending itself from a danger which threatens it from *without*...in the transference neuroses of peace the enemy from which the ego is defending itself is actually the libido...we have a perfect right to describe repression, which lies at the basis of every neurosis, as a reaction to a trauma” (emphasis is added to the text).

Even more importantly, Freud introduced the term “stimulus barrier” in his 1922 book, *Beyond the Pleasure Principle*, as an explanatory mechanism of the onset of traumatic neuroses. This development came partly as the result of his involvement in the examination of World War I veterans. In his own words: “We describe as ‘traumatic’ any excitations from outside which are powerful enough to break through the protective shield. It seems to me that the concept of trauma necessarily implies a connection of this kind with a breach in an otherwise efficacious barrier against stimuli. Such an event as an external trauma is bound to provoke a disturbance on a large scale in the functioning of the organism’s energy and to set in motion every possible defensive measure “(1928, pp.56-57). Freud retained the same position until the last years of his life when in 1933 he once again tried to define trauma: “...the term traumatic refers to an experience that within a short period of time presents the mind with an increase of stimulus too powerful to be dealt with or worked off in the normal way”.

Although the evidence provided above can clearly make the case for a post-traumatic paradigm followed by Freud throughout his career, the fact remains however that trauma was ignored for a good part of the twentieth century and at a time when the psychiatric discourse was under the intellectual dominance of psychoanalysis. If Freud seems to be the obvious source of these developments we should think twice however. Socio-historical and cultural factors, as will be shown later on in this chapter, seem to be much more powerful determinants of what theories or part of theories are selected to be registered at any time as the dominant scientific discourse. Talking about the late 1970s, McFarlane (2000a) rightly observes that “The role of trauma as a determinant of

psychiatric illness blossomed in the age when the rights of the individual were being considered and the prejudice of the state was being challenged” (p.19).

In a sense, when contemporary authors talk about the abandonment of the seduction theory by Freud what they really try to achieve by doing so is to create some kind of congruence between history and psychoanalytic theory. Their reasoning must proceed, latently though, along these lines: if trauma was paid so little attention by psychiatry when psychoanalysis was its principal paradigmatic way of investigation then Freud’s theory should be accountable for that. In order to provide evidence for such a claim though they had to do two quite controversial things at the same time. First, to present what Freud had named as spontaneous neurosis, a term coinciding more or less with that of hysteria, as his main conceptualization of trauma along with all its sexual and oedipal connotations. Second, to equate spontaneous neurosis or hysteria with the contemporary concept of PTSD. This kind of syllogism has hardly ever been presented explicitly by modern authors but they seem to implicitly insinuate it by concluding that Freud did not acknowledge the external reality of trauma. Verhaeghe (1998) was very critical of the latter conclusion to the point of exclaiming that “if one argues that Freud has abandoned his theory on trauma, this is not only wrong, it is also a forgery of the history” (p. 5).

From aforementioned quotes, especially those from the Introductory Lectures (1966/1917) and the proceedings of the Fifth International Psychoanalytic Congress (1918), seems clear that Freud made an important distinction between “traumatic and war neuroses” , on the one hand, and “spontaneous neurosis” on the other. He maintained that while for both types a traumatic experience lies at the root of their development, in the case of the latter, however, libidinal defences are more readily involved. These remarks are strong enough to counteract the first of the alleged assumptions made by some modern authors as mentioned above. In regard to the second point, the implicit equation of hysteria with PTSD, a brief discussion of some key points should be made here. Present-day accounts of Freud’s ideas on trauma take his views on hysteria and present them as a theoretical explanation of what Freud himself had later on named as “traumatic neuroses”, a term that contained in much the same way the core structure of PTSD symptom clusters described in DSM-III almost seventy years later.

If we trace the history of the concept of hysteria from Freud or even Charcot to modern days we can see that the term hysteria has been gradually abandoned and

broken down into more homogeneous and diagnostically discrete categories. The way this has been done from DSM-III onwards is by a reclassification of the concept under two main categories: i) somatoform disorders and ii) dissociative disorders. From all the separate psychological ailments included under these two categories only some of those subsumed under the dissociative disorders, like multiple personality disorder, psychogenic amnesia, and psychogenic fugue, have been linked with PTSD in the literature (see, Classen et al, 1993).

From this observation we can see the difference between hysteria and the modern diagnostic category of PTSD as well as the reason why the Freudian conceptualization of the former should not be identified and therefore confused with what Freud had named as traumatic neurosis, the closest equivalent of PTSD. In all probability Freud's distinction between the different types of neuroses mentioned earlier, namely traumatic, war, and transference neuroses corresponds to "types" of PTSD according to their causative traumas. In that sense Freud's emphasis on sexuality and the role of libido in the case of transference neuroses (hysteria) makes sense when compared with modern findings in the PTSD literature. For instance, as O'Donohue & Elliot (1992) point out "sexual dysfunctions are commonly associated with PTSD resulting from child sexual abuse and rape though this has not been identified as common in war veterans" (p.430). If the nature of trauma determines to a large extent the nature of symptoms then Freud's preoccupation with intrapsychic libidinal mechanisms, in the case of the so-called transference neuroses and thus hysteria, could well be a reflection of his continuation of the Salpetriere's tradition of studies on child sexual abuse. The nature of the traumatic stressor can determine to such an extent the subsequent symptomatology developed that writers like Kudler (2000) wonder if we should rather be speaking of PTSDs than PTSD.

It was necessary to be a little more detailed in order to be as clear as possible with regard to Freud's ideas on trauma for two important reasons. The first is that since their initial formulation in 1880s they are continuing to be as contemporary as ever and to create controversy within the Western society. His seduction theory was as divisive during the Victorian days as it was about to become exactly a century later with what was named as the "return of the repressed" or the "recovered memories movement" (see, for example, Loftus & Ketcham, 1991; Powell & Boer 1994). The second is, as already mentioned, that Freud's ideas on traumatic neuroses were actually transplanted,

through the work of Kardiner (1941), within DSM-III in order to define the core structure of PTSD symptom clusters.

Freud's work on traumatic neurosis occupied the stage of the medical-psychiatric profession from the end of the nineteenth century until the end of the Vietnam war in 1975 (Wilson, 1994). After Freud's death in 1939, just before the start of World War II, his ideas on trauma were further elaborated and expanded upon mainly by American military psychiatrists, notably Abraham Kardiner. Some new ideas and theories were also introduced in the study of trauma but the general picture of that era is rather puzzling. The reason for that is that despite an abundance of world wide conflict and disaster there seemed to be an unaccountable lack of empirical research on traumatization, on one hand, and a parallel lack of recognition of any type of trauma-related disorder within the psychiatric nomenclature, namely in DSM-I (1952) and DSM-II (1968) (Peterson et al, 1991).

In terms of paradigmatic shifts within the psychoanalytic school of thought the work of Kardiner (1941) seemed to pay increasing attention to the functioning of the ego, which meant a gradual stepping away from the importance of drives. In his historical account of trauma Trimble (1985) describes this shift as having the effect of moving the emphasis towards the concept of adaptation. In that sense post-traumatic neurosis was seen not as the result of trauma-activating conflicts within the individual but rather as the end product of failed adaptation to external, environmental stresses. Also, the fact that Kardiner emphasised that the neurotic reaction initiated by the traumatic episode cannot be accounted for by pre-morbid factors (Brett, 1996) added more to the importance of the ecological demands of reality. As Lamprecht & Sack (2000) point out it was Kardiner again who introduced the concept of "physioneurosis" putting thus the emphasis on the physiological impact of trauma. An equally important contribution was Kardiner's assertion that peacetime trauma shares the same structure with trauma resulting from engagement in warfare (Brett, 1996).

It should be mentioned however that with the exception of the last point all the rest were not truly new ideas within psychoanalysis. As early as 1917 Freud described the systemic nature of the impact of trauma which "influences emotional expressiveness; cognitive processes; motivation and goal striving; interpersonal and object relations; physiological functioning and ego-states" (Wilson, 1994, p.691). Kardiner, a trained psychoanalyst who had been Freud's analysand at some point, talked in the later edition of his *Traumatic Neuroses of War* (1959) about having as his starting

point Freud's *Beyond the Pleasure Principle* (1920) book. From the latter, Kardiner took the idea of stimulus barrier which described trauma as the result of the breakthrough of the brain's defence against external stimuli (Young, 2000). Freud (1919, 1955) also wrote about the biological basis of the fixation on the trauma: "After severe shock...the patient has undergone a physical fixation to the trauma".

Considering the above, Kardiner's contribution to theory should not be overstated. What Kardiner's work did, along with other contemporary psychiatrists, was to connect "the disorder's psychological, behavioural, and biological symptoms within a psychosomatic frame of reference" (Young, 2000, p.58). Particularly relevant to this new conceptualization was, among others, the work of Menninger who introduced the concept of "somatization reaction" aiming in this way to "reconcile bodily reactions with psychoanalysis" (Lamprecht & Sack, 2002, p. 227). Also, within the same psychosomatic framework, the works of Kurt Goldstein and Franz Alexander were very important contributions in this new way of looking at the impact of trauma. Even more important however, during the same period, was Selye and Fortier's *Adaptive reaction to stress* (1950) article which paved the way for the neuroendocrinological research in PTSD that followed later. This was a truly new development within trauma research which showed the direction for future inquiry as the psychosomatic theories fell gradually into disfavour.

For the next two decades, from 1950 to 1970, post-traumatic neurosis was almost forgotten and that could be seen in the amount of publications during this time which were almost non-existent (Peterson et al, 1991). Such was the extent of the neglect of trauma in this and other periods as well that authors like van der Kolk et al (1994) have named them as "professional amnesic periods". Publications on the subject saw a considerable increase around the beginning of the 1970s which was mainly the result of the aftermath of the Vietnam war and the psychological casualties it created. It would be useful here to pay attention to the parallel that runs through this period between the definition of trauma, on the one hand, and the kind of emphasis placed on research on the other. First, the absence of any type of trauma-related disorder in DSM I and II could single-handedly account for the scarcity of publications on trauma during these two decades. Second, the fact that the closest equivalents of PTSD in the first two editions of DSM were described as "gross stress reaction" (DSMI, 1952) and "transient situational disturbance" (DSMII, 1968) could perhaps be regarded as partially responsible for the emphasis on the role of environmental stressors in

research during the same period. It would be sensible however to avoid here any reference to the supposed directionality of such a relationship as the exact opposite argument is equally plausible, namely, that it was the kind of research during these years that led to the particular definitions within the psychiatric nomenclature.

Research during these two decades was not, strictly speaking, on PTSD but had nevertheless obvious implications on the topic. As mentioned above, the emphasis was shifted to the effects of external stressors following Selye's "general adaptation syndrome" paradigm. The works of Seligman (1968), Horowitz (1969) and Weiss (1970) represent an experimental approach to the study of stress inducing stimuli which, with the exception of Horowitz's work, were all animal studies (Lamprecht & Sack, 2002). Behaviourism with its environmental orientation shed new light on the understanding of stressors, particularly with its principles of classical conditioning and stimulus generalization, which accounted for the learned fear response to traumatic incidents (Peterson et al, 1991). Although, surprisingly enough, interest in war related trauma diminished after the Korean war attention was given to civilian accidents, natural disasters, and conditions of incarceration, particularly the Holocaust experience in Nazi Germany. A notable exception to this line of research was the landmark book by Lifton (1963) on the survivors of the Hiroshima nuclear bombing.

The 1970s were, in a sense, the catalyst years that led to the proposition for the inclusion of PTSD in DSM-III (1980). There is ample evidence in the literature that this proposition was made primarily on socio-political and moral grounds (Scott, 1990; Yehuda & McFarlane, 1995) and had as its main impetus the "historical legacy of the Vietnam War and its aftermath" (Young, 2000, p.64). There was a spate of articles, especially in the first half of the decade, describing the psychological impact of the so-called "post-Vietnam syndrome" (Shatan, 1973). The term was coined by Chaim Shatan, one of the main proponents of the PTSD diagnosis along with Robert Lifton, to describe a "delayed massive trauma" that stemmed from the inability of the soldiers to grieve in the battle zone. Shatan borrowed this idea from Freud's interpretation of the "role grief plays in helping the mourner let go of a missing part of life and acknowledging that it exists only in the memory" (Shatan, 1973, p.648).

Although there were a number of very important publications, especially at the end of the 1970s, it can be argued however that the ideas they brought were not entirely new. Van der Kolk et al (1994) identifies three "pivotal" works in the late 70s - Horowitz (1976), Krystal (1978), Terr (1979) - which "made critical linkages between

trauma of war and the trauma of civilian life” (p.593). As already mentioned, Kardiner (1941) in the past was the closest in time who made such a connection between war and civilian trauma. Moreover, Horowitz’s work combined Janet’s and Freud’s ideas from which the latter’s notion of the alternating phases of engagement and withdrawal, through which the patient tries to “metabolize” their traumatic memories, was in brief the post-traumatic syndrome that entered the psychiatric nosology (DSM-III, 1980) under the name of PTSD. What was really a refreshingly new development at the time was the so-called social psychiatry or anti-psychiatry movement that came originally out of a general cultural critique during the 1960s and 70s and “investigated the role of adversity as a cause of psychiatric illness (McFarlane & Girolamo, 1996, p.134). Along with works such as Anne Burgess and Linda Holstrom’s *Rape trauma syndrome* (1974) the realization came that, on one hand, trauma is a much more common and everyday occurrence and, on the other, that independently of the source of the trauma post-traumatic reactions share some common symptomatology.

These developments had a huge impact on the conceptualization of mental illness as a whole and created a new paradigmatic shift within psychiatry. According to Kudler (2000), “prior to the 1980s, it was unlikely that a clinician would inquire about a history of trauma or connect current problems to past traumatic experiences” (p.4). The idea that psychopathology could have an external-environmental and clearly defined cause meant that psychiatry could eventually match or even exceed the medical diagnostic criteria which “in an ascending order of desirability” could be described “on the basis of symptoms, anatomical changes, pathogenesis, and aetiology” (Brett, 1993, p.196). The PTSD diagnosis is the only one in DSM in which aetiology is clearly stated and requires an identifiable stressor that can be related to the defining symptoms. What Breslau (2002) names as “temporal ordering” is also essential for the diagnosis to be made which means that the defining symptoms “must not have been present before the stressor occurred” (p.573).

However, despite some obvious advantages of the new diagnostic category of PTSD controversy and discontent have been following it even before its official introduction in DSM-III (1980). As Young (2000) points out, “the PTSD classification was introduced into DSM-III in the face of opposition” (p.58) from the then psychiatric establishment which adhered to the positivist neo-Krapelinian principles. According to them PTSD was not a unitary condition but rather a combination of already established diagnostic categories, mainly, depression, panic disorder and generalized anxiety

disorder. Although recent studies (see, Deering et al, 1996) confirm the high percentage of co-morbidity found in PTSD cases this does not necessarily detract from the validity of the diagnosis. Another issue which still occupies researchers today was the rather controversial decision to remove post-traumatic reactions out of the adjustment and stress category and put them into the anxiety disorders in DSM-III. That change was not only a departure from the previous DSMs but also the beginning of a widening gap between American (DSM) and European (ICD) conceptualizations of trauma. The latter sees anxiety as a common though “nonspecific feature of many disorders” (Brett, 1996, p.119).

Apart from seeing PTSD as either an anxiety or a stress disorder a third way of conceptualizing it as a dissociative disorder has also been suggested. All three seem to be based on legitimate grounds and have advantages as well as shortcomings. Barlow (1988) has persuasively argued for considering PTSD an anxiety disorder and tried to further support his argument by linking PTSD with panic disorder, something that subsequent studies tried also to address (McNally & Lukach, 1992). From authors involved as members of the DSM-IV Advisory Subcommittee on PTSD came some reviews that support PTSD as a stress disorder (Davidson & Foa, 1991; Brett, 1993; Pittman, 1993). Finally, PTSD has been considered under the light of dissociative disorders (Spiegel & Gardena, 1991; Classen, Koopman, & Spiegel, 1993) and connections have been made between dissociation and somatization (Ford, 1997). The latter has generally been ignored in the PTSD literature but studies on dissociation proliferated in the 1980s and as a result PTSD and dissociation came closer together in DSM-IV (van der Kolk et al, 1994). It is not the place here to give a description along with all the pros and cons for each one of the three conceptualizations of PTSD but it is important to mention that all of them have stimulated valuable research in the field which expanded and deepened our knowledge of traumatic reactions.

Since the introduction of PTSD in DSM-III (1980) an effort was made for the development of explanatory models which would account for the epidemiological data revealing that the actual number of people that eventually went to develop the chronic form of post-traumatic reaction was relatively very small compared with the number exposed to the traumatic event. As Yehuda and McFarlane (1995) put it, “the occurrence of PTSD following a traumatic event is the exception rather than the rule” (p.1707). The figures of those developing PTSD could range from 3% to 58% of those exposed to a criterion A stressor, with the people who have experienced combat and

terrorist attack usually being somewhere in the middle of this range (Kulka et al, 1990; Abenhaim, Dab, & Salmi, 1992) and the prisoners of war and concentration camp survivors occupying the highest percentages (e.g. Beal, 1995). Realizing that the stressor itself is not sufficient to produce PTSD in people, research started moving away from the previous emphasis on the external stressors by looking inside the individual in two quite distinct ways. One was a not previously seen examination of the cognitive aspects of trauma and the other was a continuation of neurobiological research with a new focus on the peri- as well as post-traumatic alterations in neurobiological indices.

The focus on cognition took a number of different facets ranging from information processing to constructivist models. Horowitz's (1976) work combined psychoanalytic ideas, mainly those of Janet and Freud, with an information processing model which assumed a "completion tendency" principle maintaining that "the mind continues to process important new information until the situation or the models change, and reality and models reach accord" (p.249).

Janoff-Bulman's (1983) model, which dispensed with the information processing model and added a constructivist perspective instead, claimed that "post-traumatic stress disorder is largely attributable to the shattering of victims' basic assumptions about themselves and their world" (Janof-Bulman, 1985, p.18). Her model is "universalist" in the sense that although it acknowledges that the experience of victimization will depend on the individual involved it proceeds, however, by saying that there are actually three types of assumptions that are particularly affected: i) the belief in personal invulnerability; ii) the perception of the world as meaningful and comprehensible; and iii) the view of ourselves in a positive light. In her own words, "victimization calls into question each of these primary postulates of our assumptive world, and by doing so destroys the stability with which we are ordinarily able to function"(Ibid).

The recently proposed cognitive model of PTSD (Ehlers & Clark, 2000) attempted to answer the apparent puzzle concerning the disorder. The authors wonder how we could explain an anxiety disorder such as PTSD as a reaction to an impending threat, as cognitive theories have traditionally explained anxiety so far, when it is obvious that "PTSD is a disorder in which the problem is a memory for an event that has already happened" (Ibid, p.320). They suggest that PTSD becomes persistent only when a sense of serious current threat is produced. They propose two factors as the main contributors in the creation of the sense of current threat: i) the way the traumatic

experience gets appraised by the individual and ii) the nature of the trauma memory formed. Certain negative appraisals regarding the trauma and its sequelae along with the formation of a fragmented and poorly organized memory about the event are thought to produce the disorder.

A purely constructivist model developed within Personal Construct Theory (Sewell et al, 1996) seems to account for the dissociation and fragmentation in memory found in PTSD. Sewell's model maintains that PTSD is not just the result of a person experiencing an event which does not fit with their constructions of themselves and the world but actually because trauma creates "isolated construct classes that cannot enter into transitive or associative relationships with the rest of the conceptual system" (Ibid, p.81) and in that sense they remain isolated/dissociated from the rest of the system. Sewell et al (1996) also point out that an unelaborated, or else dissociated, system may already be present from an earlier trauma which can be employed again in response to subsequent trauma, accounting in this way for the higher incidence of PTSD found among people who have previously been traumatized. The latter agrees with findings in the literature that talk about the so-called "kindling effect" observed in previously traumatized individuals and which has as a result a " progressively lower threshold for PTSD symptoms" (Ford, 1997, p.11).

More recently, constructivist approaches informed by anthropological theorizing on the ethno-cultural aspects of PTSD have generated important insights into the complex relations between culture and the production of psychiatric knowledge in general (Bracken, 2001). They offer a much needed emphasis on contextual issues which have generally been avoided by mainstream research (Bracken et al, 1995). By questioning the universalist approach implicit in contemporary accounts of psychopathology they maintain that nosological entities are not discovered but rather they are culturally constructed. In that sense, it has been argued, PTSD is not a timeless disorder but rather the product of specific "practices, technologies, and narratives with which it is diagnosed, studied, treated, and represented and by the various interests, institutions, and moral arguments that mobilized these efforts and recourses" (Young, 1995, quoted in Summerfield, 2001, p. 97). Several studies have shown that previously named disorders, such as shell-shock and soldier's heart, had actually very little in common with PTSD (Bracken, 2001). Also a number of authors have mentioned aspects of traumatic experiences suffered by non-European people that are not present in the current definition of PTSD (Marsella et al, 1996). This research has proposed

more extended accounts of PTSD, such as “complex PTSD”, but at the same time seems to support the validity of its current DSM definition by pointing out that it contains both universal as well as culture-bound characteristics.

Finally, biological research conducted after PTSD was introduced in DSM-III (1980) helped considerably towards its definition as a distinct illness. As many researchers believe today, PTSD has a unique biological profile that sets it apart from what was initially thought to be simply a variant of the “normative stress response” described by Selye in the 1950s. Basic research first provided a number of theoretical biological models during the 1980s (Antelman, 1988; Friedman, 1988; Kolb, 1987; Krystal et al 1989; Pitman, 1988; van der Kolk et al, 1985) which all contributed a great deal to the understanding of a number of possible mechanisms involved in the disorder but failed, nevertheless, to provide an animal model of PTSD (Pitman, 1993; McEwen, 2002). All this animal research was basically following a stress response paradigm which came to be challenged in the 1990s. It was mainly endocrinological findings that supported the idea that PTSD is not a stress disorder and it was for that reason that authors like Pitman (1993) recommended alternative names for the disorder such as “posttraumatic mental disorder” or “posttraumatic re-experiencing disorder” (p. 185).

The work of Rachel Yehuda, conducted during the 1990s, was mainly responsible for suggesting that PTSD should not be considered as a normative stress response and also that traumatic events should not be seen as the primary cause of its symptoms. This is quite a dramatic departure from previous conceptualizations but is nevertheless based on sound biological and epidemiological evidence. On the one hand, endocrinological data provide evidence that PTSD is different from both stress and major depression, on the other, epidemiological data show that PTSD is just one of the possible outcomes of traumatization.

Yehuda’s proposed model is based on alterations found to have taken place within the hypothalamic-pituitary-adrenal (HPA) axis following trauma in people who eventually developed PTSD. Unlike the typical increase in adrenocortical activity and the subsequent dysregulation of this system that seems to characterize the conditions of stress and major depression, PTSD involves two characteristic changes that derive from a highly sensitized HPA axis: i) a decrease of basal cortisol level and ii) an increase in the negative feedback regulation (Yehuda & MacFarlane, 1995). Cortisol is responsible for bringing back to normal the body’s reaction to stress and a low level of this hormone at the time of trauma leaves the body hyperactive for a considerable amount of time. It

has been hypothesized that this hyperactive state progressively sensitizes a host of biological systems and leaves the “individual hyper-responsive to a variety of stimuli” (Ibid, p.1710). This conceptualization seems to be in agreement with the phenomenon of kindling derived from animal studies.

Considering that PTSD is “a post hoc formulation of the effects of trauma” (Yehuda, McFarlane, & Shavel, 1998, p.1307) meant that most of the early studies on PTSD were conducted retrospectively which was something that prevented them from determining whether trauma could have had alternative outcomes, including recovery or different forms of disorder. This research suggested a number of risk factors for developing PTSD after trauma from which the most crucial ones identified probably are: injury severity, past psychiatric history, prior trauma, and intrusive, avoidance, and dissociative symptoms following immediately after trauma. More recent studies, however, using prospective designs have failed to demonstrate any significant effects of the above factors (see McFarlane, 1997). What these findings are actually suggesting is that predictions in the acute aftermath of trauma are impossible to make and it is exactly at this point that Yehuda’s model proves to be useful by proposing that there are some salient biological predictors that are manifest “within hours after the traumatic event” (Yehuda et al, 1998, p.1308). The most prominent of those predictors is the low level of cortisol that results in a failure to shut down the sympathetic nervous system following a traumatic event. As a result of this failure the normal memory processing is thought to be disrupted and that leads to an increase of the re-experiencing and reprocessing of the traumatic incident in the early posttrauma period. This re-experiencing in turn sets off a number of other reactions that will increase intrusive symptoms and also will disrupt the neuro-circuits of fear and anxiety leading to an enhanced startle response. This view explains PTSD reactions as the result of biological predisposition to hyper-responsiveness, which results in a progressive sensitization of a number of systems. According to Yehuda et al (1998), this model is more in touch with the empirical findings of research and it has predictive value, which explains why some individuals may develop PTSD while others will not and at the same time provides a basis for considering the wide range of the other possible stress reactions.

Concluding here this retrospective account of the paradigmatic cycles in PTSD research the obvious question to ask is whether or not the right paradigm for PTSD has finally been found. Considering that PTSD has an all-embracing impact on the

individual with psychological, biological, and social manifestations, can a reductionist account proposing a single etiologic factor adequately explain all post-traumatic disorders? Kudler (2000) considers that the reductionistic approaches found today within PTSD literature represent some kind of atavistic tendency, a return to “germ theory” which has long been abandoned in medicine and replaced with a “multidimensional, holistic appreciation of disease and health” (p. 7). In that sense a shifting between different paradigms along with an appreciation of the social, biological and psychological determinants of trauma is probably the best and most recommended approach.

1.2.2. Socio-political influences in the conceptualization of trauma.

We could probably not find a more telling way of attesting the involvement of the social and political within the various conceptualizations of trauma other than by simply tracing through history the assortment of its medico-psychiatric names. One wonders if “hysteria”, with its obvious sexual connotations, could have ever assumed epidemic proportions during the last decades of the nineteenth century in France if the French society was not willing to address the social issues surrounding child sexual abuse and the sexual abuse of women. Also, if the term “compensation neurosis” was ever to be coined by Rigler in 1879 without the previous introduction of compensation laws in Prussia in 1871. What else do the terms “railway spine” and “shell shock” reflect other than certain political, social, and technological landmarks in the history of Western Europe? Could the term “post-Vietnam syndrome” have gained any currency if a number of anti-war American psychiatrists and mental health workers did not get more politically active than their opponents during the 1970s?

As Summerfield (2001) puts it, “PTSD is a telling example of the role of society and politics in the process of invention rather than discovery” (p. 95). This is a position currently accepted even by those researchers supporting its purely biological basis. Yehuda and McFarlane (1995), being two of the major figures of the proposed biological model, recognize that the PTSD diagnosis “came to be by acceptance of the political and social rights of traumatized groups” (p. 1710). Trauma research should not be seen as something special or different in that sense though but rather as a typical

example of scientific inquiry in general which is never a value-free activity (Becker, 1995). The discipline of psychiatry, in particular, seems to be “driven as much by politics and convention as it is by the application of knowledge” (McFarlane, 2000b, p.896). Maybe this last point could potentially explain what some researchers have come to name as “professional amnesic periods” (van der Kolk, 1994), or “psychiatry’s ambivalent relationship with the field of traumatic stress” (McFarlane, Ibid), or even “the vulnerability of knowledge about trauma to erosion” (Brett, 1996, p.125), when referring to the waxing and waning of knowledge within trauma research. How could the absence of any noteworthy publication be accounted for between the two World Wars? How could the absence of any combat related diagnosis in DSMI (1952) and DSMII (1968) be justified after World War II and the Korean War?

We have to look at psychiatry’s scientific practice as embedded within the wider social and political context if we wish to make any sense of the aforementioned “anomalies” in the production of psychiatric knowledge. We have also to take into account the otherwise peculiar nature of post-traumatic diagnosis, within psychiatric classification, as it seems to be the only one for which etiology is clearly stated, as well as the only one for which compensation can be paid (Mezey & Robbins, 2001). There is always the obvious question to be asked, especially when dealing with mass casualties, of where the psychiatrist’s loyalties lay (McFarlane, 2000a). What would be the financial cost to be paid by the state for compensations after massive war casualties as was the case for World War I, for example? Even by leaving aside financial considerations, how psychologically helpful would be for a nation to be reminded of the traumatic nature of war at a time when oblivion is its only pursuit? McFarlane and Girolamo (1996) seem to propose a kind of “social and cultural dissociation” as a possible coping mechanism taking place at times of such large-scale traumatic events as World Wars. In that sense, the absence of any considerable amount of research on trauma after particularly catastrophic wars could possibly well be explained by the dynamics of social consciousness or that of social structure. In any case, “the structure of a nation at peace is different from that in war “(McFarlane, 2000a, p.19) and the shutting off of human suffering allows “some focus on the future” (Ibid, p.24).

Another very important factor contributing to the extensive involvement of socio-political dynamics in the history of trauma within the Western psychiatric discourse is the fact that the disorder seems to “provoke florid social polarities” (Ibid,

22). The problem seems to arise from the very moment that a particular type of trauma is recognized by the psychiatric establishment because it is actually at this very moment that their genuineness starts to be questioned (McFarlane & Girolamo, 1996). This was actually happened in the case of child sexual abuse at the time when Freud was investigating the issue and the same was repeatedly present in later cases concerning psychological trauma arising from physical injuries such as train accidents. In any of such incidents the issue of malingering was a central one in all medico-legal cases and the phenomenon of factitious PTSD has also been recorded as in the well known case of the Vietnam veteran who never got to Vietnam (Lynn & Belza, 1984). Also, certain social attitudes were proven to be very powerful determinants even in the shaping of scientific theories as is thought to be the case in the alleged abandonment of Freud's so-called seduction theory. Victorian morality seemed to raise powerful barriers to any suggestions of a widespread sexual abuse of children being perpetrated by adults and especially by close family members. The resistances within the scientific community were equally strong and Freud's sexual theory was forcefully resisted. As was argued in the first part of this chapter, we should look at Freud's change of emphasis – a move towards a more “constructivist” position which went beyond the either/or dichotomy of the external versus internal - as a compromise to those dominant social pressures and not as any true abandonment of his post-traumatic paradigm.

Finally, the influence of socio-political factors can have potentially an important role to play in how people perceive trauma and are able to cope with it. There is substantial evidence in the literature suggesting that social support is one of, if not the most, significant predictors for the development of chronic PTSD (van der Kolk, 1987, 1994; Sullivan & Gorman, 2002; Andrews, Brewin, Rose, 2003; Murphy et al, 2003). The catastrophic effects of the Vietnam war according to this literature may be partly explained by the fact that the war was unpopular back in the homeland and “there was a loss of communality among returning veterans because discharges were individual and because there were not veteran groups (except Vietnam veterans against the war) to celebrate the homecoming or at least to give experience meaning” (van der Kolk, 1987, p.154). This is usually contrasted with the aftermath of other wars like the Korean war where “there was no great flood of post-traumatic stress disorder” (Ellard, 1997). This last point brings us closer to the third and final part of this chapter, which deals with the question of how culture in general and notions of subjectivity in particular mediate both the conceptualization of trauma and its effects on people.

1.2.3. The contribution of culture in the formulation of the concept of PTSD.

The social and political should not be seen as independent, objective forces shaping the course of history but rather as the context in which cultural, meaning-making practices are taking place. No war in itself, for example, contains an intrinsic meaning but rather its meaning gets established within the cultural community of people that take part in it. The domain of the social and political praxis forms a public or else intersubjective space within which every aspect of human life belongs to and gets constructed through discursive and cultural practices (e.g. Davies & Harre, 1990). This is a quintessentially social constructionist position which seems to be shared by almost everyone who has considered so far the cultural aspects of traumatization. Although the label of “social constructionism” as such may be rejected by some in favour of other names, such as “cultural constructivism” (Gaines, 1992), the fact remains however that researchers from a wide range of theoretical backgrounds have come to problematize all aspects of human experience, including trauma, by questioning its taken for granted or else objective status.

According to these views the nosological entities of psychiatry are not discovered but rather they are culturally constructed inventions. In this sense the classificatory systems of psychiatry, like the DSM, are regarded to be a way of “articulating a particular culture’s unconscious ethno-psychological assumptions” (Ibid, p.4) and, in that sense, one of defining self and other. This function of psychiatric classification becomes obvious in cases such as the successful challenge to the diagnostic entry of homosexuality in DSM-II which is usually contrasted to the simultaneous acceptance of the PTSD diagnosis in DSM-III. Adding more to the problematic status of DSM is the argument that it is not universally accepted, even within the United States, where it is published.

Currently, psychiatry is increasingly identifying itself with biomedicine which seems to provide “the central social space where the cause of individualism is being articulated in bioethical discourse about rights and contracts” (Bracken, Giller,

Summerfield, 1995, p.1074). The notion of the individual as something that precedes society and is independent of culture seems to infiltrate the assumptions perpetrated by Western medicine. It is widely accepted today that within the Western world this particular conception of the individual is pivotal but, as anthropologists have shown, is nevertheless “a rather peculiar idea within the context of the world’s culture” (Geertz, 1975, quoted in Bracken et al, 1995, p.1074). The PTSD diagnosis is thought to carry all these assumptions of Western individuality, which sees the person as an isolated entity, conceives its problems in psychological terms, and ignores its surrounding socio-cultural context.

Because this particular notion of Western individuality derives mainly from the scientific discourse of biomedicine it has generally been conceived to be a “natural” and for that reason a “culture-free” idea. What anthropological research has been reporting however is that biology is not “an acultural, unproblematic domain” but rather a “cultural construction, a cultural system” because, after all, there are “several very distinct professional (ethno)biological traditions in China, Japan, India, the Middle East, Europe, and North America” (Gaines, 1992, p.17). In that sense it is more proper to conceive of contemporary Western psychiatry as ethno-psychiatry since “nosologies have common sense meaning(s) for its formulators and its users” (Ibid, p.15) but not necessarily for cultural outsiders.

Psychiatry’s model of trauma, as has been expressed in DSM-III (1980) and been successively developed in its later editions, presupposes a certain notion of subjectivity along with a host of other supposedly “subjective” elements that accompany it such as “memory”, “self”, emotion” etc. This notion of subjectivity, however commonsensical it appears to be for Western people, is in no way “natural” or “essential” and its social and discursive constitution can be traced within the time limits of the last hundred and fifty years or so of Western European and Northern American history.

Specifically, as many trauma researchers have come to admit the central role that memory plays in post-traumatic symptomatology, it would be interesting to see that the notion of the traumatic memory itself, however obvious, is nevertheless “historically determined and rooted in culturally specific beliefs concerning self-awareness” (Young, 2000, p.53). According to Young (2000) the notion of traumatic memory “emerged in the closing years of the nineteenth century” and gave birth to a “new political economy of memory, in which the person who owns the memory in

question...is not necessarily the same person who possesses the meaning of this memory or, in some cases, knowledge of the memory's very existence" (p.57).

Seeing concepts such as "memory", "subjectivity", "trauma", etc. not as subjective entities possessing any kind of essential nature but rather as existing in the public domain and being discursively constructed, help us explain their changes in time as well as their cultural differentiations. Supporting this thesis is the realization that the definition of trauma has already seen some changes within DSM by gradually moving beyond the stressor that "would provoke symptoms of distress in almost everyone" (in DSM-III), to progressively incorporating the subjective appraisal of the individual experiencing the trauma and by widening the definition of traumatic situations (in DSM-IV). Also, the fact that people from non-Western cultures usually seem to report a different set of symptoms following traumatisation is again supporting the above argument. As somatization and dissociation are more commonly seen among traumatized non-Western people, researchers have come to criticize the concept of PTSD for its implicit ethnocentric assumptions (Becker, 1995; Marsella et al, 1996; Summerfield, 2001).

According to Summerfield (2001) "trauma has become a pervasive idiom of distress in Western culture" (p.98), and also, the conflation of these two has increasingly "a naturalistic feel" (p.96). Trauma has not only seemed to have provided Western psychiatry with a whole new paradigmatic way of thinking about mental illness in general but also seems to have taken away the stigma attached to psychiatric diagnosis. As has been reported, PTSD is the only psychiatric diagnosis that anyone would like to have (Andreasen, 1995). In North American and increasingly in Western European culture nowadays' compensation from accidents and the social recognition of victimhood which accompanies it have all contributed to a gradual abandonment of earlier values that used to stress resilience and composure such as the "stiff upper lip" of British culture. Parallels have also been drawn between the concept of PTSD and what has come to be called post-modern condition in the Western world. As Bracken (2001) observes, "if the post-modern condition does involve an undermining of meaning, order and coherence, perhaps this goes some way towards explaining the current level of interest in PTSD, a syndrome said to be the result of a breakdown in the meaningfulness of the victim's world" (p.13). Whatever the connections of trauma with contemporary Western culture the former should be seen as embedded within the latter and their relationship as bound to reflect the peculiar nature of their mutual dynamics.

1.3. Overall aims

This thesis seeks to explore post-traumatic stress disorder from an explicitly constructivist perspective. One of its principal aims is to investigate the conceptual organization in people diagnosed with the disorder and to locate changes in conceptual structure that derive from psychotherapeutic interventions. Additionally, the relation between patterns of construing and certain personality traits that could play a role as possible antecedents and perpetuating factors of the disorder in psychologically healthy individuals is also explored. Finally, this thesis attempts to explore and at the same time problematise the diagnostic category of PTSD by considering some phenomenological aspects of people's experiences of the disorder.

Chapter Two: PTSD study

2.1. Introduction

...normal and abnormal are not two psychologies, they are merely two possibilities described in the same terms (Bannister and Fransella, 1971, p. 161)

The aim of the present study is to empirically test and conceptually expand the personal construct theory model of post-traumatic stress disorder as developed and further elaborated by Sewell and his colleagues (Cromwell, Sewell & Langelle, 1996; Sewell, 1991; Sewell, 1997; Sewell et al, 1996; Sewell & Williams 2001;). Since the beginning of the nineteen nineties there has been a growing literature on constructivist conceptualizations of traumatisation which has provided theoretically based models of post-traumatic stress adjustment and maladjustment coupled with proposed treatment interventions and techniques (Harter & Neimeyer, 1995; Klion & Phenninger, 1996; Neimeyer & Stewart, 1996; Ronen, 1996; Viney, 1991; Viney, 1996; Winter & Gould, 2000). With the only exception of Neimeyer and Stewart's (1996) role-theoretic narrative approach all the rest of the above cited literature derives its conceptual impetus directly from Kellian (Kelly, 1955) notions of psychopathology and psychological processes (e.g. validation/invalidation, aggressive elaboration, role constriction, the Experience Cycle, etc).

The constructivist literature on trauma seems to converge on a number of points allowing thus for abstractions to be drawn. A tentative summary of the common themes running through the aforementioned constructivist models is worth noting here.

First, from a personal construct perspective, trauma seems to massively invalidate some of the most basic sense-making processes represented by a person's core constructs (Harter & Neimeyer, 1995; Viney, 1991), which according to Kelly are those that "govern people's maintenance processes – that is, those by which they maintain their identities and existence" (1955, p.482). Invalidation should not be seen as a single aetiological factor in the development of PTSD, however, since the same notion seems to be central in a variety of psychological disorders ranging from agoraphobia to delusions. As Button (1983) remarks, different forms of psychological maladjustments/disorders could be seen as "different strategies for coping with invalidation" (p. 319). Very often, in an attempt to preserve the integrity of their

construct systems, traumatised people use pre-emptively one or two of their core constructs (e.g. happy/sad, loved/unloved) in their construal of everyday life jeopardizing in this way both predictability and validation afforded by their system. This pattern of construing negative or traumatic experiences is also accompanied by a relatively unelaborated, negative, and extreme way of viewing life. Drawing on Kelly's concept of the Experience Cycle (anticipation of an event → commitment to experiment → encounter with the event → confirmation or disconfirmation of the expected outcome → constructive revision), it was proposed that the earlier a blockage occurs within the cycle the more severe the resulting disorder is likely to be (Neimeyer, 1985).

Second, the notion of role constriction, developed in Klion and Phenninger's (1996) model, adds a needed social dimension in the conceptualization of trauma. Having worked with Vietnam veterans, the authors conclude that a "significantly constricted repertoire of social roles" (p.127) seems to be the main issue in this population of traumatised individuals. The same could also be said for PTSD patients in general whose role conceptions seem to be, on the whole, tight and constricted since attachments during and following trauma are usually either impaired or unavailable. On the other hand, research has shown that whenever attachments and social networks are in place during potentially traumatic situations these can function as protective factors for individuals by reducing any enduring or long-lasting post-traumatic reactions. At an individual level constriction has been defined by Kelly as a mechanism for limiting anxiety, a way of reducing an overwhelming situation to something manageable. Parallels could be drawn here between constriction and the concept of pre-emption which also could be employed in dealing with stressful or traumatic situations. The former refers to the person's attempt to reduce their perceptual field thereby reducing what is construed while the latter involves a reduction in construing to only one way of viewing something. In this way constriction refers to what we make sense of (i.e. "elements" in repertory grid terms) and pre-emption refers to the restriction of what we use to make sense of reality (i.e. "constructs"). Both, constriction and pre-emption could equally be involved in post-traumatic reactions.

Finally, therapeutically speaking the constructivist models primarily talk about the elaboration of the traumatic experience as a means of recovery, which is a process that could potentially require the creation of new core constructs which could be orthogonal to the person's original constructs. The formation of new core constructs is something that has not been studied so far and the present study aims to investigate it by

comparing pre- with post-therapy constructions of trauma in PTSD patients. Recovery could also entail construct re-alignment, involving the loosening, revision and tightening of old constructs. In accordance with the Kellian principle of constructive alternativism, the loosening of the associations between the traumatic event and a set repertoire of interpretations along with the provision of new alternative views and ways of thinking about the event could facilitate elaboration and subsequent recovery in therapy.

Although these Kellian or personal construct accounts have illuminated important facets of post-traumatic stress itself, they have not, however, yet provided an etiological model based on clearly operationalised variables and empirically testable hypotheses. Sewell and his colleagues, in an attempt to fill this gap in the literature, have been elaborating for the last fifteen years or so a personal construct model of PTSD, which is presented below.

2.1.1. The personal construct theory (PCT) model of post-traumatic stress disorder (PTSD).

The constructivist model of PTSD developed by Sewell and his colleagues more than fifteen years ago (Sewell & Cromwell, 1990) is a theory-based model adhering to the principles of personal construct theory as put forward by Kelly (1955). Although Kelly never dealt with trauma itself he has however produced conceptual tools that could potentially account for the whole array of traumatic symptomatology.

Sewell (1991) placed the Kellian notion of threat, defined as the awareness of an imminent comprehensive change in ones's core structures, as the centrepiece of his model. According to Kelly, when a person happens to come under threat their resources are steered in two ways: a) towards modifying the core of their system (e.g. develop new constructs) or b) towards abandoning any higher-order constructs in order to preserve the core of the system or else, as Kelly himself put it, "to claw frantically" at an earlier point in the system's development. The notion of threat is also central to many accounts of cognitive and emotional reactions to traumatic experiences within contemporary models of post-traumatic stress disorder (Brewin, 2001; Ehlers & Clark, 2000).

The two aforementioned patterns of reaction, or else constructive alternatives, resulting during or after an encounter with a threatening situation, are considered by the model as potentially producing ineffective constructions that could lead to PTSD via two distinct but nevertheless interacting modalities (see Figure 2.1).

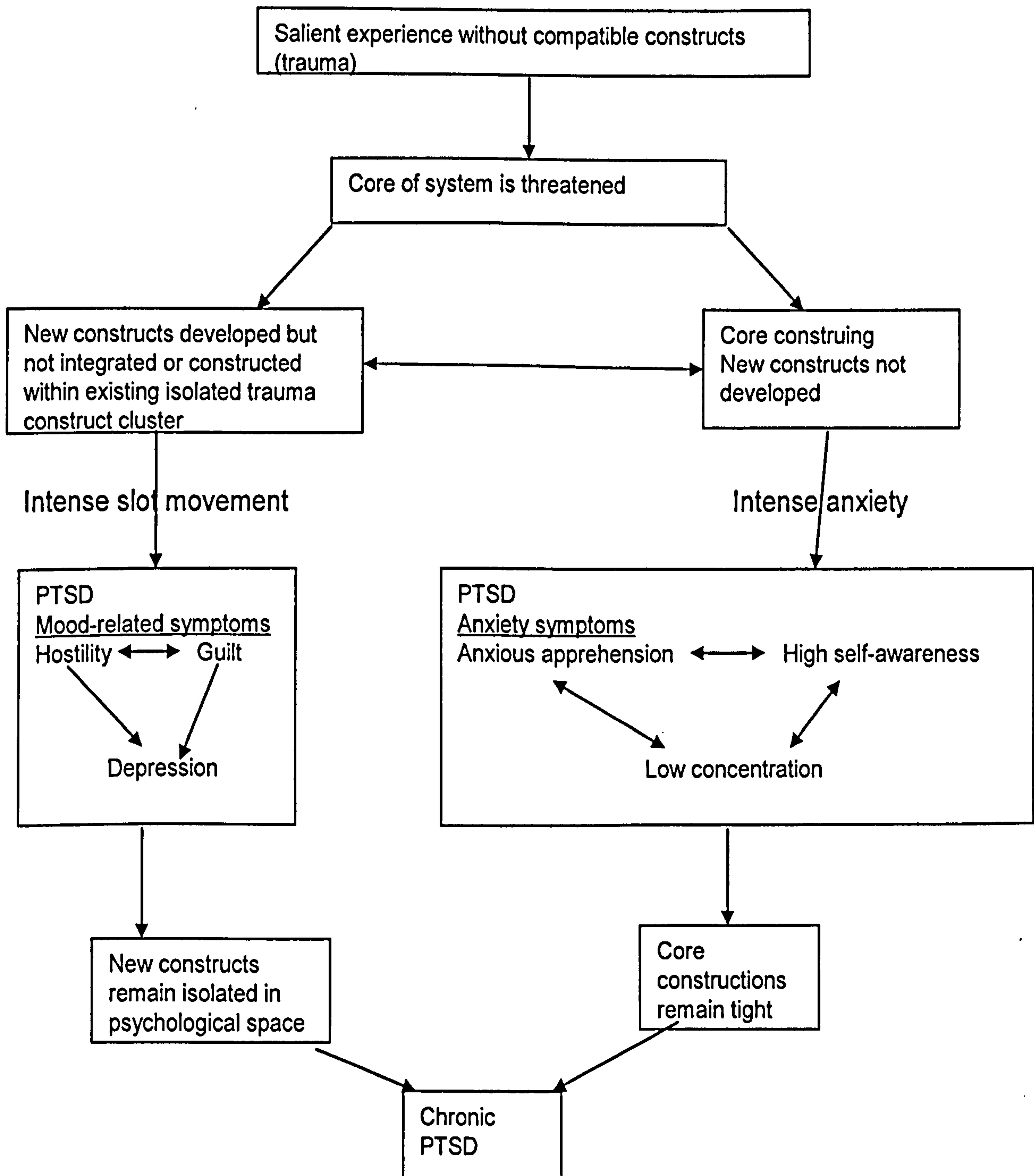


Fig. 2.1: A partial reproduction of Sewell et al (1996) model of PTSD (The diagram has not included the parts of the model concerning effective construction of the traumatic experience and therapeutic movement for simplicity and clarity of presentation).

The first constructive alternative, which comes as a failure to develop new constructs that could account for the traumatic event (also known as “constructive bankruptcy”), is thought to produce anxiety that keeps the experience temporally current. Such a reaction might account for anxiety symptoms often reported by PTSD patients as well as re-experiencing phenomena which are central to the clinical diagnosis of the disorder, such as flashbacks, nightmares, intrusive thoughts and a sense of reliving the experience long after it ceased to happen. The second constructive alternative, which results from abandonment of higher order constructs that might lead to dissociated constructions, is thought to produce mood related symptoms such as depression, hostility and guilt.

The model theorises that because dissociated trauma-related construct subsystems are essentially isolated within psychological space, these have the propensity for slot movement (i.e. the shifting of the assignment of an element, such as the “self”, from one pole to another along a construct dimension), which is thought to produce mood shifts, particularly when it concerns the self or some aspects of it. Slot movement is thought to enable the individual to incorporate new experiences without having to develop new constructs by simply shifting, for example, the assignment from the positive to the negative pole of a construct and vice versa.

Sewell (1991) proposed an interactive relationship between the two kinds of constructive alternatives in order to account for the syndromic integrity of PTSD since both sets of symptoms (i.e. anxiety and mood based symptoms) seem to often co-occur. If a person fails to produce adequate constructs to assist him/her to make sense of the situation then that, according to the model, will produce anxiety in the individual and that anxiety in turn may produce slot movement within the isolated construct cluster because anxiety is usually construed negatively and attributed to the self (see Fig.1). On the other hand, slot movement within the dissociated construction will produce mood disturbance that might be incomprehensible to the individual, who might in turn react with anxiety. This interaction and the resulting cycle it creates might result in a “catastrophic or panic response” (Sewell, 1997, p.210).

Sewell (1991) was the first to test the model using as his research subjects two groups of U.S male Vietnam veterans matched in terms of demographic and combat experience. The groups consisted of 30 veterans each, with the first group containing hospitalised veterans with PTSD and the second veterans without PTSD or any other psychiatric diagnosis. Both groups completed a 20 x 20 life events repertory grid

(LERG) consisting of an equal number of positive and negative life events including the most traumatic or negative event during Vietnam, along with a structured clinical PTSD interview and demographic and status questions. The study set out to test two main hypotheses, first, that the two groups would differ in terms of the elaboration of the traumatic event and, second, that the lack of elaboration of the traumatic event expected to be found in the PTSD group would be related to the severity of the PTSD symptoms

The first hypothesis was tested using as a measure an index of elaboration derived from the Hierarchical Classes Analysis software programme (HICLAS; De Boeck & Rosenberg, 1988). The index of elaboration gives a measure of “connectivity” that exists between a certain event/element and the number of sets/classes of constructs connected to that particular event/element. The larger the number of sets/classes of constructs related to the event the more elaborated the latter is regarded to be. As predicted, the traumatic experience in the PTSD group was shown to be less elaborated compared to the most traumatic or negative event in the control group even after statistically controlling for general levels of elaboration and extent of combat exposure in both groups. The second hypothesis, the so-called linearity hypothesis, regarding the relation between severity of PTSD symptoms and levels of elaboration was not supported. As Sewell (1991) explains, there could be at least two possible explanations for that finding. First, that the differences between the PTSD and non-PTSD groups described above could have nothing to do with post-traumatic stress per se but rather be a mere artefact of general emotional difficulties or help-seeking behaviour. Second, a design-related explanation based on the fact that a hospitalised PTSD veteran group might not contain enough variability in the target variable (i.e. trauma related construct elaboration) that would allow for a relationship to be seen between PTSD severity and elaboration. The latter could be possibly seen with a sample containing combat veterans who had diagnosable PTSD but either did not seek therapy or could function at an outpatient capacity.

The HICLAS programme and some of its technical features that are essential for an adequate understanding of its analytical procedures are described in detail in Chapter Three. Along with the description, a critique of the way HICLAS has so far been used to analyse repertory grid data has also been provided together with a proposed new way of analysis, developed by the author, to help improve its application within the field. It would be sufficient to briefly mention here that the HICLAS programme produces a hierarchical (ordinal) solution based on subsumed (subordinate) and subsuming (super-

ordinate) classes or clusters of elements and constructs, which is in accordance with the Kellian notion of the nature of a personal construct system as this was stated in his organization corollary: “each person characteristically evolves, for his convenience in anticipating events, a construction system embracing ordinal relationships between constructs” (Bannister & Fransella, 1971, p. 22)

Apart from the elaboration hypothesis tested via HICLAS analysis the following repertory grid measures in Sewell’s study (Sewell, 1991; Sewell et al, 1996) seem to complete the picture of the PTSD Vietnam veteran group: a) as regards the valence measures of the construct poles the participants were asked to assign a “positive”, “negative”, or “less positive” label for each construct pole. The PTSD group was found to use the “negative” or “less positive” valence more often for the emergent pole and they also used the “less positive” valence less often in general; b) regarding extremity ratings the PTSD group rated events more extremely in general and particularly events after Vietnam; c) the PTSD group had a lower variability of intensity score compared to the controls. This measure, developed by Bannister (1962), is an indication of the extent to which a person’s construct system consists of complex construct interrelationships denoting in that sense the degree of the system’s elaboration of construing; d) Pythagorean distance between the negative combat event and the rest of the events was greater for the PTSD patients. For both groups events before Vietnam were more distant from the traumatic event than events thereafter and, for the PTSD group in particular, events after Vietnam were more like their trauma experiences, with later negative events sometimes described as “more of the same”.

To complete the picture of the model a description of how it accounts for recovery from PTSD follows. Basically, if the two constructive alternatives proposed by the model as the causative factors in the development of the disorder (i.e. dissociated construction and constructive bankruptcy) were to be followed to their logical conclusion it becomes evident that therapy should assist mostly in two ways dictated respectively by the aforementioned constructive alternatives themselves. First, therapy should help the client integrate aspects of their fragmented and dissociated experience with the rest of their construct system. Second, therapy should also help develop new constructs that will account for aspects of the traumatic experience not yet fully understood or explored by the client.

2.1.2. A critical appraisal of the PCT model and the aims of the present study.

Admittedly, the personal construct theory of trauma “is necessarily speculative” (Cromwell, Sewell, & Langelle, 1996, p.178). To begin with, there are only a few empirical studies to date that have attempted to directly test the assumptions made by the model and the ones that did produced evidence that only partially support it. Before we embark on reviewing the relevant literature it should be mentioned that the testing of the model’s main hypothesis (i.e. the reduced elaboration of the trauma related construct subsystem) via the HICLAS software presents us with a number of technical considerations that could not be reviewed here as that would prove beyond the scope of this Introduction. As already mentioned, however, the reader can find a critical account of HICLAS’s analytical procedures in Chapter Three along with a new proposed way of analysis developed by the author.

Without going into much detail it should be sufficient to mention at this point that the results from the two studies that have so far supported the model both came from Sewell (Sewell, 1991 and also Sewell et al, 1996; Sewell, 1996), who used the clustering of the implicit pole of the constructs in his HICLAS analysis without realising that such a choice was neither neutral nor without consequences. At the time, as Sewell (1997) admitted later, the role of such parameters was thought to be irrelevant to the outcome of the analysis. Chapter Three explains that as long as both construct poles of a system are involved in a person’s construing it would be limiting, at least, or even arbitrary, if no rationale was provided for opting to use exclusively either pole as the basis of analysis as was the case in both of Sewell’s studies.

In an attempt to examine the potential influence of using exclusively either pole of a construct system in the HICLAS analysis Moes (1997) re-analysed the elaboration data from the Vietnam combat (Sewell, 1991 and Sewell et al, 1996), mass murder (Sewell, 1996) and sexual assault (Moes & Sewell, 1994) studies. The results of her analysis showed that in the case of the sexual assault victims neither type of clustering (emergent nor implicit) revealed any significant differences between the group of women rape victims who developed PTSD and a similar group who did not develop the disorder. In the case of the Vietnam veteran and mass murder studies the clustering of the emergent pole, as opposed to the implicit pole used in the original studies, showed the unexpected finding that the PTSD group had a more (instead of a less) elaborated

trauma-related construct subsystem although the differences did not reach statistically significant levels. Another study examining the elaboration hypothesis in HIV- positive women both with and without PTSD has also failed to reveal any differences between the groups as far as elaboration of the traumatic event is concerned (Jones, 1999). Finally, a study by Winter and Gould (2000) using a group of PTSD patients with different types of trauma history also failed to provide support for the elaboration hypothesis when clustering the implicit pole.

Taking into account the above findings the present study aims at using a new way of analysing repertory grid data via the HICLAS software, developed by the author, as a means of providing a methodologically sound approach to the testing of the elaboration hypothesis. The new method, fully presented in Chapter Three, uses both construct poles (emergent and implicit) simultaneously rendering the arbitrary choice of using either of them unnecessary.

Another aim of this study is to introduce a version of the HICLAS software called TUCKER-HICLAS (supplied for personal use to the author by Eva Ceulemans, K.U. Leuven, Belgium) to repertory grid analysis. Given that the original HICLAS version requires the conversion of a repertory grid's ratings into binary digits, losing in that way potentially useful information, it was thought that a HICLAS version that would allow for the original scale ratings to be preserved could potentially enhance its explanatory capabilities. The TUCKER-HICLAS version is presented in more detail in Chapter Three.

The central aim of this study is to explore the recovery aspect of the PCT model of trauma which could conceivably be regarded, in a way, as the acid test of the model's explanatory power. A study conducted by Sewell (1996) provided some partial evidence for the recovery aspect of the model since all of its measures were taken within the first three months following a mass murder incident, which meant that they concerned post-traumatic stress (PTS) response - or an acute form of PTSD according to DSM-IV classification - rather than chronic PTSD. Sewell found that recovery from post-traumatic stress symptoms, three months after the traumatic incident, could be predicted by increased elaboration levels of the traumatic event. Interestingly, elaboration was found to be the strongest predictor of recovery from a PTS response when compared with other variables which had predicted the onset of symptoms such as exposure and previous PTS. Thus, the findings could more appropriately be described as supporting evidence for the protective role of elaboration which may help reduce

PTS symptoms after a traumatic incident and possibly prevent the occurrence of full blown PTSD.

To date there has been only one attempt to directly address the recovery aspect of the model in a small study conducted by Winter and Gould (2000) which supported only partly the PCT model. The study compared pre- with post-therapy data which failed to support the elaboration hypothesis in its pre-therapy data set and, due to its small number of post-therapy cases ($n = 3$), could not arrive at any generalisable conclusion regarding the expected increase of trauma elaboration as a result of a successful outcome. The study introduced comparisons between repertory grid measures and some well established questionnaire measures, which revealed the following statistically significant findings: a) the distance of the traumatic event from other events was found to be positively correlated with the intrusion subscale of the Impact of Events Scale (Horowitz, Wilner, & Alvarez, 1979) suggesting that the more differently the trauma is construed from the rest of the events the more re-experiencing symptoms are likely to be experienced by the patient and b) a positive correlation was also found between the extremity of ratings of the traumatic event on the repertory grid and, first, the Impact of Events Scale and its Avoidance subscale and, second, the Beck Anxiety Inventory (Beck, Steer, & Brown, 1996).

The present study also seeks to establish relations between repertory grid measures and some well established questionnaire scores (see Method section below). More specifically, this study aims at testing the PCT model's derived assumptions by hypothesising that recovery from PTSD will be accompanied by: a) increased elaboration of the trauma related construct subsystem; b) reduced extremity scores of negative events; c) reduced use of negative valence of the emergent poles of the constructs d) reduced Pythagorean distances between the traumatic event and the rest of events and e) increased elaboration of the construct system as a whole.

2.2 Method

2.2.1. Pre-therapy assessment

Participants

There were 36 people referred for psychological treatment following experiences of very stressful life events (18 females and 18 males with an age range between 18 to 61 years; mean age = 35.8, SD = 10.2). The initial number of people consenting to take part was 40; three of them, although they attended, were unable to complete the assessment due to the severity of their symptoms and one was not considered to be as a PTSD case, based on his questionnaire scores. All participants were recruited from the north London area (England, U.K) and could be classified according to their ethnic background in the following way: 44.82% British, 27.58% from the Middle East, 10.34% from Eastern Europe, 6.89% from Africa, 6.89% from the European Union and 3.44% from the Indian subcontinent.

According to the type of trauma experienced, based on client's descriptions of it during the assessment, the following were found to be the most common amongst participants: traffic accidents (22.2%), rape (5.5%), torture (11.1%), childhood sexual abuse (5.5%), being attacked (19.4%), and death/disappearance of husband (8.3%). All the rest of the trauma types are represented by one case each (2.7%): head injury, hearing about a suicide attempt, fighting at war, death and disappearance of a spouse, being attacked at home, accident (head injury), witnessing the killing of one's own family by the army, the July 7th London terrorist attack (not personally experienced), and watching a beheading on the internet (for a detailed description of the participants' demographic details see Appendix E).

Procedure

All participants were recruited voluntarily and without any payment after being referred to the Clinical Psychology Department of Barnet, Enfield and Haringey Mental

Health Trust (London, U.K) to receive psychological treatment for their post-traumatic symptoms. Ethics approval for the study was obtained from the Local Research Ethics Committee of Barnet, Enfield, and Haringey Mental Health Trust (London, U.K). The author contacted all the participants via the post by sending them: i) a Research Information Sheet, providing information about the purpose of the study and explaining the nature of the assessment (see Appendix A), ii) a Consent Form (see Appendix A), and iii) a self-addressed envelope in which the participant could return their signed consent form in case they agreed to participate in the study.

The assessment battery was administered by the author in sessions with each individual client. For three clients a translator was invited to assist the communication between the author and the participant and to translate the self-administered questionnaires of the battery after consulting with the author. The first measure to be administered was the repertory grid (LERG: see measures below) and then the five questionnaires followed in no particular order. The completion time of the assessment was, on average, one and a half to two hours for those participants whose English was their first language or had a good command of it as their second language while it took between three to six hours when a translator was used. Assessments exceeding three hours were split into two sessions with the second session following a week later. Below is a description of the measures used in the assessment battery.

Measures

Questionnaire measures:

i) Beck Anxiety Inventory (BAI: (Beck 1990)

The BAI is a 21-item self-rating questionnaire which assesses the severity of anxiety symptomatology. Each question represents an anxiety symptom and the participant is asked to rate the severity of that symptom on a 4-point scale ranging from “not at all” (0 points) to “severely” (3 points). With a possible maximum score of 63, the following classification of scores is a recommended guide for the assessment of the degree of anxiety: 0-7 representing minimal levels of anxiety, 8-15 mild, 16-25 moderate and 26-63 severe anxiety. Beck & Steer (1991) have identified specific symptom clusters reflecting neurophysiological, subjective, panic and autonomic

dimensions. Concurrent validation with the Trait and State anxiety subscales of the STAI (Spielberger 1983) as well as the Hamilton Anxiety Rating Scale (Steer et al, 1993) was found to be high. High internal consistency was reported with Cronbach's alpha of 0.92 (Beck & Steer 1993). The BAI is reported to be the third most frequently used measure of anxiety with adult populations (Piotowski, 1999) and it has been translated as well as validated in a number of languages (Freeston et al, 1994; Novy et al, 2001).

ii) Beck Depression Inventory (BDI-II: Beck, Steer & Brown, 1996)

The BDI-II is the second edition of the well-known and well-validated Beck Depression Inventory (BDI: Beck & Steer, 1993) which assesses for severity of depressive symptoms. The BDI-II is a 21-item questionnaire which asks the participant to rate depressive symptoms on a 4-point scale ranging from 0 to 3 in terms of severity. A total score is estimated by summing up all the ratings, with higher scores indicating more severe depression. A reliability estimate of 0.91 has been reported in several studies (see, Beck et al, 1996; Buckley et al, 2001). The following classification of symptom severity is a generally accepted one: scores ranging from 0-9 are regarded as normal, 10-18 as mild to moderate, 19-29 as moderate to severe and 30-63 as extremely severe.

iii) General Health Questionnaire (GHQ: Goldberg & Hillier, 1979)

The GHQ is a 28-item self-administered questionnaire used as a screening instrument of current psychological morbidity particularly within general practice settings (Goldberg, 1978; Goldberg & Williams, 1988). It comprises four subscales which provide a breakdown of illness into somatic symptoms, anxiety and insomnia, social dysfunction and severe depression. Each item is rated on a 4-point scale in which the first and second points are scored as zero (0) and the third and fourth points as one (1). This method of scoring provides a maximum possible score of 28, with a total score of 13 or more indicating a positive psychiatric condition (Easton & Turner, 1991). The recommended cut-off score however for a positive result is 7 points or more (Goldberg et al, 1979). Stuart et al (1993) reported that the GHQ's structure seems to hold up across cultures and the scale has been translated in 40 different languages. Cronbach's alpha coefficient of 0.92 has been reported as a reliability measure of the GHQ (Cao et al, 2003).

iv) PTSD Symptom Scale (PSS: Foa, Riggs, Dancu, Rothbaum, 1993)

The PSS is a measure of PTSD symptoms according to DSM-III-R criteria (American Psychiatric Association, 1987). According to Foa et al (1993), who have developed and tested the scale with clinical populations, the PSS is reliable and valid for diagnosing PTSD as well as monitoring changes in PTSD severity. The scale consists of 17 items which provide a total PTSD severity score as experienced by the client in the two-week preceding period. The PSS is divided into the three subscales of re-experiencing (4 items), avoidance (7 items) and arousal (6 items). Each item is rated on a 0 (not at all) to 3 (five or more times per week) scale with scores ranging from 0 to 51. At the end of the scale there are two questions for which the participant is asked to provide an answer in writing about the duration of their symptoms as well as mention other symptoms and problems currently experienced. The PSS has been concurrently validated with the Impact of Events Scale (Horowitz et al, 1979) and the Beck Depression Inventory (Beck et al, 1996) yielding .81 and .80 respectively. Cronbach's alpha of 0.91 and a 1-month test-retest reliability of 0.74 have been reported by Foa et al (1993).

v) The Impact of Events Scale (IES: Horowitz, Wilner & Alvarez, 1979)

The IES is a 15-item self-report questionnaire with two subscales measuring levels of intrusion (7 items) and avoidance (8 items) symptoms, which are scored separately. The participant is asked to think about their traumatic experience and to subsequently rate the 15 items, according to how they have been feeling in the last seven days, on a 4-point Likert scale ranging from "not at all" (0 points) to "often" (5 points). Because it asks for a single traumatic event to be considered, one of its main limitations is that it is hard to apply in cases of multiple trauma.

Since the IES is a descriptive rather than a diagnostic tool there are no cut-off points although scores ≥ 25 as well as ≥ 40 have been reported as clinical thresholds (Horowitz 1982; Carr 1997). The instrument has proven to be highly valid and reliable (Horowitz et al 1979; Zilberg, Weiss, & Horowitz, 1982; Weiss & Marmar, 1997) and has been extensively used within the field of traumatic studies (Jones 1985; McFarlane

1988; Dyregrov, Kristoffersen, & Gjestad, 1996; Hyman 2004). Split half reliability for the total score was reported by Horowitz et al (1979) to be 0.86 and Cronbach's Alphas for intrusion and avoidance were 0.78 and 0.82 respectively. Test re-test reliability was also high ($r = 0.87$ for total score, 0.89 for intrusion and 0.79 for avoidance)

vi) Life Events Repertory Grid (LERG)

The LERG is a variant form of Kelly's (1955) grid form of the Role-Construct Repertory Test (Rep Grid). It was developed by Sewell (1991), although similar versions can be found elsewhere (Fransella, Bell & Bannister, 2004). The Repertory Grid is a well established assessment measure of conceptual structure (Fransella, Bell & Bannister, 2004; Neimeyer, 1985; Smith, 2000; Winter, 1992) which "provides a rare combination of an idiographic approach coupled with objectivity in scoring" (Winter, 2003, p.27).

The LERG used in the present study consisted of fifteen elicited elements and constructs (15 x 15). The elements were elicited by asking the participant to provide alternatively a positive and a negative event from specific periods in their lives including the traumatic event. In case the participant had experienced multiple traumas they were asked to provide the one which they regarded as the most extreme in terms of the stress experienced. (see Appendix A for the list of the events' descriptions used for the element elicitation).

The triad method was used (Kelly, 1955) for the elicitation of the constructs. The participant was presented with three elements written on paper cards, at a time, and asked "how are two of these alike in some important way in which they are different from the third?" (Kelly, 1955). The participant's answer to this question provided the emergent pole of the construct. Subsequently the participant was asked to define what is the opposite of the emergent pole and that became the contrast (or implicit) pole of the construct. The participant was asked then to indicate for each pole of the construct if they thought of it as positive, negative, or as something that could be characterized as both positive and negative at the same time. The participant did this by assigning a plus symbol (+) if they thought of the pole as positive, a minus (-) if they thought it was negative and a plus-minus symbol (\pm) in case they thought that the pole contained both qualities.

In total, fifteen different triads of the elicited elements were presented to the participant containing the following combinations: seven of the triads consisted of the traumatic event (TE) along with one positive and one negative event. Two triads

contained the TE along with two negative events and, similarly, two triads contained the TE with two positive events and finally, there were an additional four triads half of which contained three positive events and half containing three negative events. Slight deviations from the schedule of combinations described above could take place in case the participant was unable to detect similarities in any given triad and different combinations were requested, in which case an effort was made for the general procedure to be followed as closely as possible.

The elements were rated according to each individual construct on a six-point Likert-type scale on which ratings from 1 to 3 indicated that the element was related/connected to the emergent pole (1 denoting the strongest possible connection between the element and the pole, 2 somewhat less and number 3 was the “neutral” choice, when the participant felt that the pole does not really relate to the element but still belonged to that side of the construct). Ratings ranging from 4 to 6 on the scale indicated the element’s connection with the contrast or implicit pole (6 denoting the strongest possible connection, 5 somewhat less and 4 being the “neutral” choice).

Grid measures:

i) Distance measures: Based on a GRIDSTAT (Bell, 1998) analysis, the mean Pythagorean distance between the TE and the rest of the events-elements as well as the mean Pythagorean distance between all events-elements (excluding the TE) were calculated by hand and subsequently compared. Smaller values indicate that elements are being construed more similarly and larger values that they are being construed differently.

ii) Conflict: The concept has been used interchangeably with other terms such as “inconsistency”, “contradiction” and “imbalance” and is an indication of the degree of elaboration of a construct system. Here, following (Bell 2004b), conflict was operationalised as existing within a grid when either: 1) “An element is at the same time close to two constructs which are themselves different or distant” or 2) “An element is similar or close to one construct’s pole and at the same time is different to or distant from another construct’s pole, where the two construct poles are similar or close” (Bell, 2004b, p.54). The overall percentage of conflict within grids as well as the percentage of conflict associated with each individual element was assessed using the computer software programme GRIDSTAT (Bell 1998).

iii) Variability of Intensity: This measure can be used as another index of elaboration within a grid and was provided by the GRIDSTAT's computation of the standard deviation of squared multiple correlations between constructs. The higher the standard deviation values the more elaborated a construct system is thought to be.

iv) Extremity of rating: Since the use of extreme ratings on a scale has been shown to have links to certain personality attributes or even indicate pathology (Hamilton 1968; O'Donovan 1965; Sewell 1996), the extreme ratings (1 and 6) used in the grids were counted for each individual element.

v) Construct poles' valence: Assigning predominantly the negative valence (-) to the emergent pole and using the combined positive and negative valence (\pm) less often characterized a clinical PTSD group when compared to a non-clinical control group (Sewell 1996). Three aspects of valences were measured: 1) the number of negative valences assigned to the emergent pole, 2) the total number of negative valence in the grid and 3) the overall number of the combined positive and negative valence option (\pm).

vi) Index of elaboration of the stressful event (SE): This index was calculated by subjecting the grids to hierarchical classes analysis (De Boeck & Rosenberg, 1988) using the HICLAS computer software programme (De Boeck, 1992). The HICLAS index of elaboration provides a measure of how well integrated an element is within a person's construct system. The index for the TE was calculated and then compared with the mean level of elaboration of the rest of the elements.

vii) Principal component analysis: The percentage of variance accounted for by the first principal component was used as an estimator of "tightness" or uni-dimensionality of the participants' construing. The higher the percentage of variance of the first component the more tight and uni-dimensional a person's construct system is thought to be.

2.2.2. Post-therapy assessment

Participants

All participants were asked to take part in the post-therapy assessment via a postal letter. Only nine of them responded positively and agreed to complete the post-therapy assessment (5 males and 4 females with ages ranging from 25 to 52; Mean age = 37.22, SD = 9.80). It should be mentioned beforehand that the relatively poor participation in the post-therapy assessment poses severe limitations on what can be inferred about factors associated with recovery. The poor response rate is mainly due to the nature of the PTSD sample, which was consisted, in large part, of non-British people who were highly mobile and thus difficult to trace and contact. Five patients received cognitive-behavioural therapy (CBT) and the remaining four had eye movement desensitisation and reprocessing therapy (EMDR). The time elapsed between the pre and post-therapy assessments ranged from 7 to 29 months ($M = 16.33$, $SD = 6.85$). The psychotherapy sessions attended by clients ranged from 6 to 59 ($M = 18$, $SD = 16.6$). There were four successful cases (group 1), three unsuccessful cases (group 2), in which the patients actually deteriorated after receiving treatment, and two cases in which there was some improvement but the patients were still symptomatic after therapy (group 3). The assessment of the outcomes was based on the questionnaire measures described earlier.

Procedure

All participants were contacted via the post by the author and asked to participate voluntarily and without payment. The same assessment battery as in pre-therapy was administered by the author in sessions with each individual client. All clients used the same elements as in the pre-therapy testing in the repertory grid but they

were asked to produce new constructs. For one participant a translator was recruited to assist during the repertory grid test and to translate the self-administered questionnaires.

2.3 RESULTS

2.3.1. Pre-therapy data analysis

Calculation of the trauma-construct elaboration index via HICLAS

In order to test the central hypothesis of the personal construct model of PTSD each participant's repertory grid was subjected to Hierarchical Classes Analysis via the HICLAS software programme (version 2.0; De Boeck, 1992). The analysis was performed at each individual rank, from 1 through 7, for a decision to be reached regarding the best fitting rank. A rank could be seen as the equivalent of a factor in a factor analysis and it determines the subordinate level classes allowed to be part of the analysis (see Chapter Three for a more detailed description of HICLAS analytic procedures).

Tab.2.1: Means and Standard Deviations of HICLAS Goodness of Fit by Rank and clustering type.

Types of clustering	Rank	Mean (N = 36)	SD
Combined (1-0/0-1)	1	0.53	0.07
	2	0.86	0.09
	3	0.90	0.09
	4	0.92	0.07
	5	0.94	0.09
	6	0.95	0.08
	7	0.96	0.09
Single (1-0 or 0-1)	1	0.51	0.06
	2	0.85	0.09
	3	0.89	0.08
	4	0.91	0.07
	5	0.92	0.09
	6	0.94	0.08
	7	0.95	0.08

Rank four was considered to be the most fitting rank in the two clustering types (single and combined, see also Chapter Three) used in this study. This decision was reached after taking into account: i) the means and standard deviations of HICLAS

Goodness of Fit (GOF) index at each individual rank (see Table 2.1); ii) the graphic representation of HICLAS analysis at each rank.

The means show that rank four contains a large amount of GOF without any substantial increases at higher ranks (see Figures 2.2 and 2.3). Also, the standard deviations reveal that rank four contains relatively low levels of within-subject deviation in both clustering types.

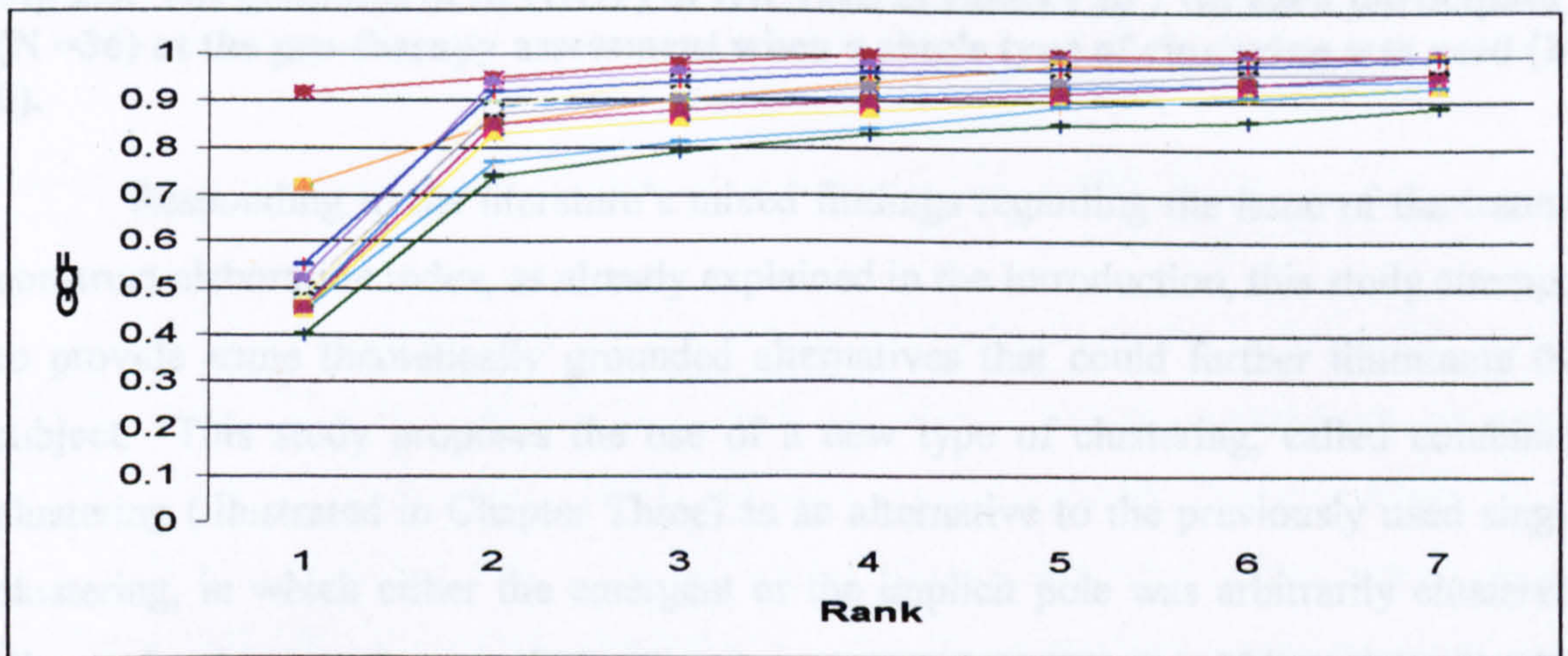


Fig.2.2: The goodness of fit (GOF) of HICLAS at ranks 1 to 7 for each participant (N = 36) at the pre-therapy assessment when the combined type of clustering was used (1-0/0-1).

The HICLAS graphic representations also support the choice of rank four since at that rank the hierarchies (see Figure 2.4) appear to be the most “sensible”. The latter means that the hierarchies at rank four seem to represent a complex enough picture of the individual’s construct system without becoming either too simplistic, and thus losing valuable information (as at ranks 1, 2, 3), or too complex, by containing many empty classes and un-classed object/attributes.

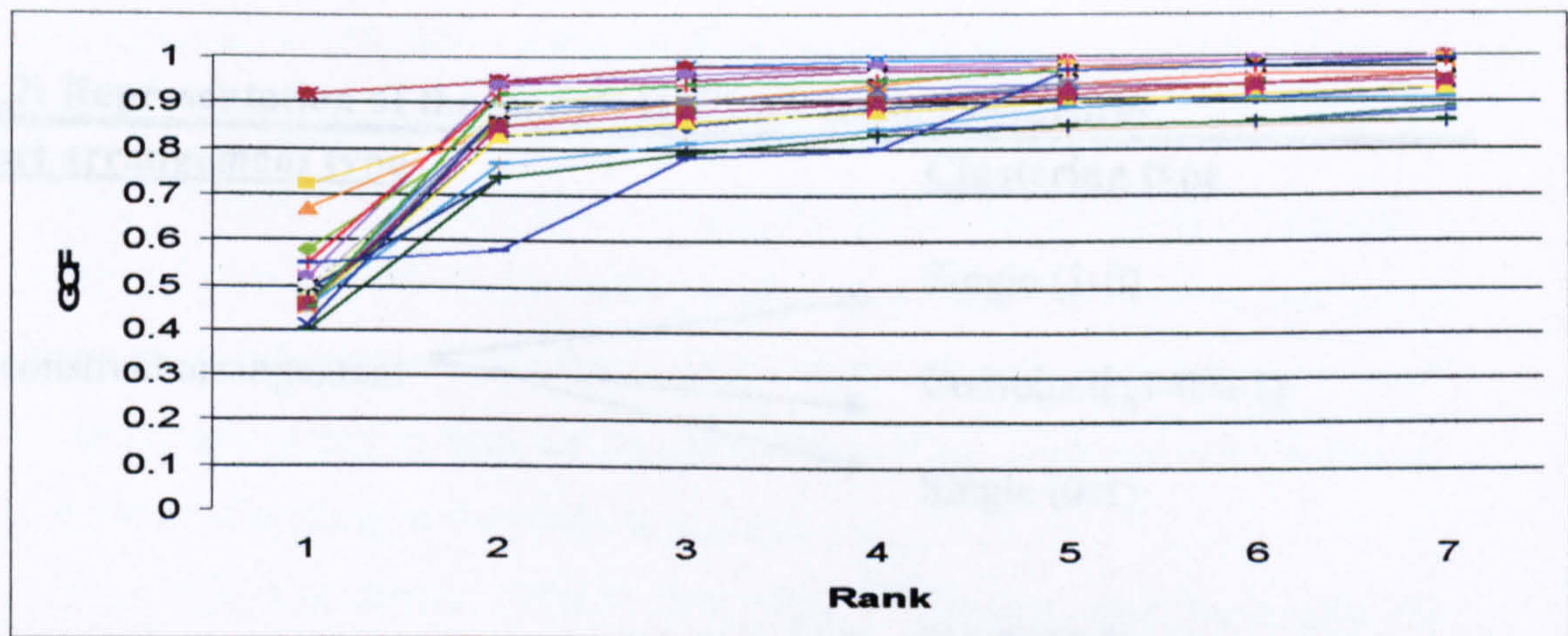


Fig 2.3: The goodness of fit (GOF) of HICLAS at ranks 1 to 7 for each participant (N =36) at the pre-therapy assessment when a single type of clustering was used (1-0).

Responding to the literature's mixed findings regarding the issue of the trauma construct elaboration index, as already explained in the Introduction, this study attempts to provide some theoretically grounded alternatives that could further illuminate the subject. This study proposes the use of a new type of clustering, called combined clustering (illustrated in Chapter Three) as an alternative to the previously used single clustering, in which either the emergent or the implicit pole was arbitrarily clustered. The study also tested out a different arrangement of constructs within repertory grids according to which all positive poles are placed on one pole (in this case the implicit pole) and all negative poles on the opposite pole (the emergent pole). The latter arrangement was used in order to examine whether the poles' valence influences, in any way, the level of elaboration. If, as Shapiro & Forrest (1997, p.51) assume, positive cognitions are in any way related to more processed or elaborated memories, then it would be useful to examine whether by separating the positive from the negative poles in a grid the differences in elaboration between the traumatic and the rest of the events will be more clearly visible.

Taking all the above into account, two different arrangements of constructs within grids (normal versus positive and negative valence put on separate poles) along with three different types of clustering (single (1-0), combined (1-0/0-1), single (0-1)) were tested out (see Table 2.2).

Table 2.2: Representation of the study's HICLAS testing sequences.

<u>Construct arrangement type</u>	<u>Clustering type</u>
Normal construct arrangement	Single (1-0)
	Combined (1-0/0-1)
	Single (0-1)
Separate construct valence arrangement	Single (1-0)
	Combined (1-0/0-1)
	Single (0-1)

Despite the argument against the use of the single clustering types, explained in Chapter Three, this study uses them in order to, firstly, provide connections with the existing literature and, secondly, further test their use and examine their grounding.

It should be noted that in all HICLAS analyses presented below comparisons were made between the construct elaboration index of the traumatic element/event and that of a comparison positive element/event (element No 3) from the participants' childhood years. The latter was selected on the grounds of having the least possible connection with any traumatic recollection in the participants' life.

Normal construct arrangement

(i) Single 1-0 clustering (clustering the emergent pole): The mean trauma-related construct elaboration index was 3.58 (SD = 1.46) compared to 3.00 (SD = 1.43) for the comparison element ($t(35) = 2.1, p = .04$). In this case the trauma seems to be significantly more elaborated contrary to Sewell et al's (1996) finding and theoretical position that trauma would be less elaborated when compared with non-traumatic events. It should be noticed here that in Sewell et al's study the exact opposite type of clustering was used (i.e. 0-1 clustering the implicit pole).

(ii) Single 0-1 clustering (clustering the implicit pole): The mean trauma-related construct elaboration index was found to be 2.30 (SD = 1.16)

compared to 3.08 (SD = 1.33) for the comparison element ($t(35) = 2.58, p = .01$). In this case trauma appears to be significantly less elaborated, supporting thus Sewell et al's position, but doubts should be raised regarding the validity of both single types of clusterings since it appears that one is simply the reverse of the other. Additionally, there is an absence of a well established criterion that would dictate the choice between one of the two types of clustering as the basis of the analysis.

(iii) Combined 1-0/0-1 clustering (clustering simultaneously the emergent and the implicit pole): The mean trauma-related construct elaboration index was 3.97 (SD = 1.64) and that of the comparison element was 3.72 (SD = 1.25) producing no significant differences between them ($t(35) = 0.98, p = .33$). In this case, it would seem that the reverse effects of the two single types of clustering seem to cancel each other out when they are combined together.

Separate construct valence arrangement (positive valence on the implicit pole and negative valence on the emergent pole)

(i) Single 1-0 clustering (clustering the emergent pole): The mean trauma-related construct elaboration index was 3.36 (SD = 1.41) compared to 1.16 mean elaboration index of the comparison element (SD = 1.40). Trauma appears to be significantly more elaborated ($t(35) = 5.54, p = .0001$) than the non-traumatic event.

(ii) Single 0-1 clustering (clustering the implicit pole): The mean trauma-related construct elaboration index was found to be 0.83 (SD = 1.15) compared to 3.70 for the comparison element (SD = 1.54). In this case trauma appears significantly less elaborated than the comparison event ($t(35) = 9.30, p = .0001$).

(iii) Combined 1-0/0-1 clustering (clustering simultaneously the emergent and the implicit pole): The mean trauma-related construct elaboration index was 3.61 (SD = 1.31) while that of the comparison element

was 3.41 (SD = 1.25). There was found to be no significant difference between the two elaboration indices ($t(35) = 1.07, p = .29$).

Summing up the above findings we can see that both construct arrangements produce the same results as far as the elaboration index is concerned. In both cases the two single types of clustering (1-0 and 0-1) seem to produce the same result in reverse (with trauma appearing as significantly more elaborated in one type and as less in the other). It is worth noticing, however, that there was a pronounced difference in the significance levels in the single types of clustering at the two different construct arrangements. In the case of separate valence arrangement the significance level appeared to be at a much higher level (.0001) compared to the one in the mixed valence arrangement (.014 and .043). The combined type (1-0/0-1), on the other hand, seems to cancel out the effects of the two single clusterings and thus no significant differences in the elaboration index seem to occur between the traumatic and the comparison element.

Considering the HICLAS findings it is difficult for a simple conclusion to be drawn regarding the elaboration of the traumatic event since both arguments (more or less elaboration) could be equally supported by the data. It would seem, therefore, necessary to look for alternative measures of elaboration that would independently support either the “more elaboration” (superordinancy) or the “less elaboration” (subordinancy) hypothesis.

A recent article by Bell (2004a) attempts to elaborate on Kelly’s (1955) organization corollary by proposing a new way of estimating superordinancy among both elements and constructs via the GRIDSTAT software programme (Bell, 1998). While the estimation of superordinancy for constructs and elements is a common feature in both the HICLAS and the GRIDSTAT programmes, there is a difference between them regarding the way they calculate it. Setting aside the different algorithms each programme uses for its calculations, one fundamental difference is that while the HICLAS programme estimates elements in relation to constructs, GRIDSTAT, on the other hand, considers them separately. As could be seen more clearly in a typical HICLAS graphic representation of a conceptual structure (Figure 2.4), elements appear in relation to constructs. In the case of GRIDSTAT there is no such a representation in

* A two-tailed test of significance was used in all statistical testing reported in this section .

its output and so no assumptions can be made regarding the relationships between constructs and elements.

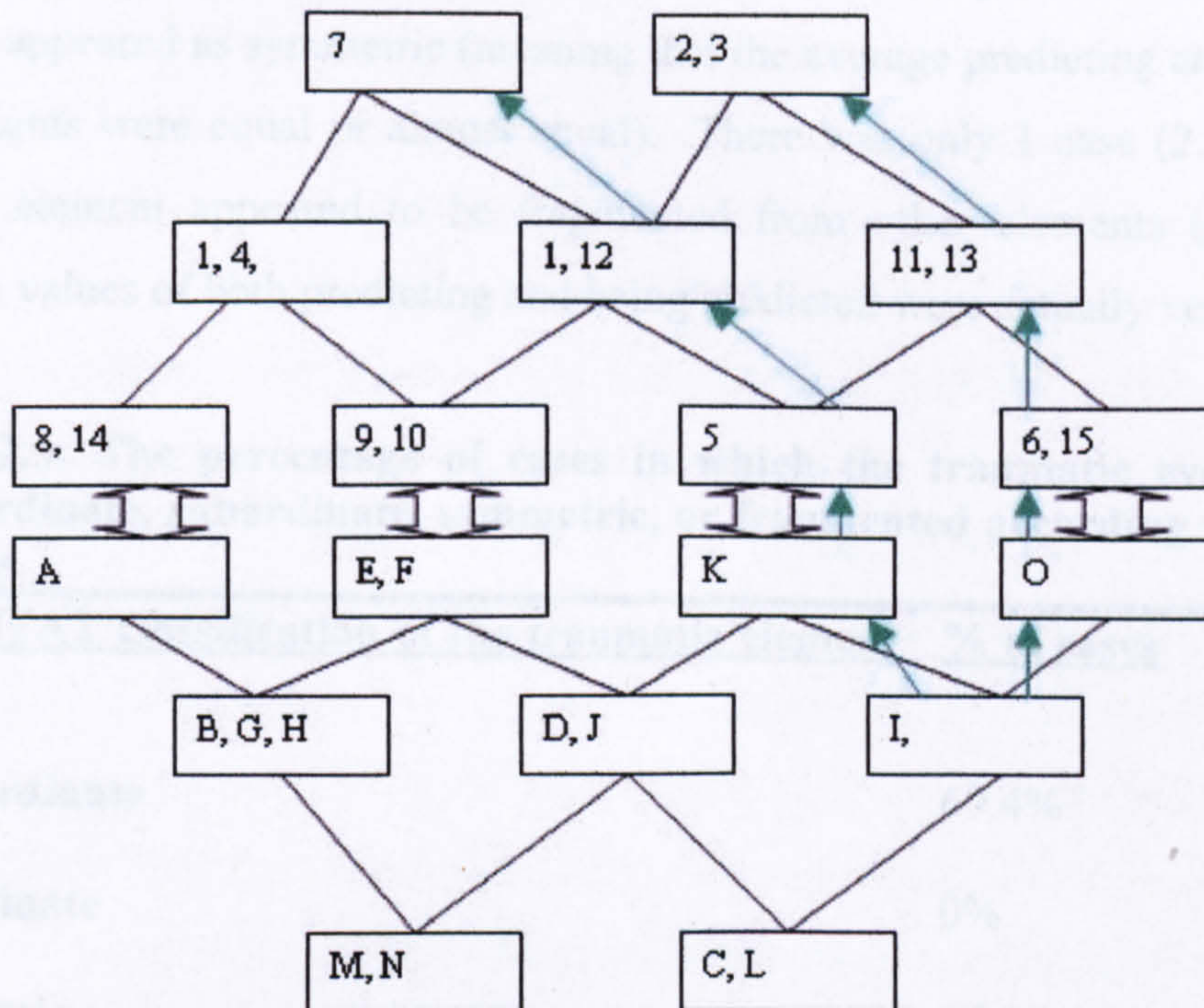


Fig 2.4: An example of a HICLAS graphic representation of its solution (at rank 4). Letters represent elements and numbers represent constructs (arrows show the way the elaboration index is calculated for element I).

Having considered the differences between the two measures of superordinancy offered by HICLAS and GRIDSTAT it would be worth using Bell's (2004a) measure of superordinancy as a comparison to the contradictory HICLAS findings regarding elaboration of the trauma event.

Estimation of trauma superordinancy via GRIDSTAT

As Bell (2004a) explains, an element or a construct could be classified as: i) superordinate (or predictor); ii) subordinate (or predicted); iii) symmetric; and iv) fragmented. By subtracting the average asymmetric *Somers' d* coefficients for predicting and being predicted values a decision can be reached regarding the status of a certain element or construct in accordance with the aforementioned four categories.

As a GRIDSTAT analysis revealed in this study, the traumatic element appeared to assume a superordinate status in the majority of the cases (see Table 2.3). In 25 out of 36 participants (69.4% of the total cases) the trauma element was classified as superordinate (or predicting, meaning that the average predicting coefficients were

considerably larger than the predicted ones). There was not a single case (0%) with the trauma appearing as subordinate (or predicted, meaning that in no case did the predicted coefficients appear considerably larger than the predicting ones). In 10 cases (27.7%) trauma appeared as symmetric (meaning that the average predicting and being predicted coefficients were equal or almost equal). There was only 1 case (2.7%) in which the trauma element appeared to be fragmented from other elements (meaning that the average values of both predicting and being predicted were actually very low).

Table 2.3: The percentage of cases in which the traumatic event appeared as superordinate, subordinate, symmetric, or fragmented according to a GRIDSTAT analysis.

<u>GRIDSTAT classification of the traumatic element</u>	<u>% of cases</u>
<u>as:</u>	
Superordinate	69.4%
Subordinate	0%
Symmetric	27.7%
Fragmented	2.7%

A comparison of the HICLAS and GRIDSTAT results regarding the level of elaboration of the trauma element.

Bearing in mind the different analytic procedures employed by the two software programmes, described earlier, a comparison between them will be necessarily speculative.

In HICLAS the single clustering types produced mutually exclusive results from which a choice between one or the other could not be supported on pragmatic or epistemological grounds (see Chapter Three for a more detailed discussion). Seen under this light the lower trauma elaboration index reported by Sewell et al (1996) appears to be a mere methodological artefact since there was no theoretical justification given for clustering the implicit pole (i.e. using the single clustering 0-1). The combined clustering type revealed no significant differences between the elaboration index of the trauma and that of the comparison element. This result could not provide a certain answer to the problem, however, since it seems quite probable that it expresses

nothing more than a simple combination of the single clusterings canceling each other out.

In GRIDSTAT, on the other hand, there was a single solution in which the traumatic element appeared, in the majority of cases, as superordinate (predicting), which is in stark contrast with the fundamental assumption on which the personal construct model of PTSD is based. In HICLAS's terms this result could be seen as the equivalent of finding the trauma element being significantly more elaborated than the comparison event. Furthermore, the fact that there was not a single case of trauma appearing as subordinate or predicted throws more doubts on the viability of the personal construct model's main assumption. A GRIDSTAT outcome that could be seen as potentially supporting the personal construct model would be the trauma element appearing as belonging to the fragmented category in the majority of the cases. This latter finding could potentially support Sewell et al's (1996) conjecture that trauma is dissociated or disconnected from the rest of the individual's construct system. Since the fragmented category represents a tiny minority of the cases the latter hypothesis cannot be supported from the present data.

This study attempted to test yet another way of calculating the elaboration index of the traumatic event in order to provide further evidence which could potentially support some of the findings presented so far. This calculation is based on a newly developed version of the HICLAS software, called TUCKER-HICLAS (supplied for personal use to the author by Eva Ceulemans, K.U. Leuven, Belgium), which instead of using binary data uses ratings (see Chapter Three for a detailed discussion). The use of ratings is thought to offer a closer approximation to the original grid data and thus provide a more accurate depiction of the relationships between constructs and elements.

Calculation of the trauma-construct elaboration index via TUCKER-HICLAS

The data were entered into the programme in a "semi-binary" fashion using the combined clustering form. Semi-binary means that a rating scale (from 1 to 3) was used for one pole while the other pole was rated as zero. Thus, first data were entered into the programme by having the emergent pole rated from 1 to 3 and the implicit pole rated as zero, and then, the exact inverse thus creating a 30 x 15 matrix as in the case of the

combined form of clustering used in the HICLAS software (see Chapter Three for more details). Rank 4 was considered to be the most appropriate rank to conduct the analysis following the exact same procedure described earlier for HICLAS.

An additional feature of TUCKER-HICLAS is that it provides a measure of the strength of the association between the element and construct classes. The present analysis thus provided two measures:

i) a comparison between the index of elaboration of the traumatic event and the comparison (positive) event (element No3) as in the HICLAS analysis. The analysis revealed that the traumatic event ($M = 3.38$, $SD = 0.93$) was significantly more elaborated than the comparison positive event ($M = 2.75$, $SD = 1.38$), $t(35) = 2.2$, $p = .035$. The magnitude of the differences in the means was also a large one ($\eta^2 = .12$)

ii) a comparison between the strength of association of the traumatic event and that of the comparison event (elem. No3). There was found to be significantly stronger associations between the trauma event ($M = 2.69$, $SD = 0.57$) and its related construct classes than between the comparison event ($M = 2.25$, $SD = 0.85$) and its associated construct classes, $t(35) = 2.5$, $p = .016$.

The above findings seem to provide support to the GRIDSTAT results since both suggest that the trauma event occupies a superordinate position within a patient's conceptual structure. These same results, however, seem to be in stark opposition to the central idea of the personal construct model of PTSD put forward by Sewell and his colleagues.

The present analysis is thought to provide a methodologically sounder approach to data analysis when compared to the one used by Sewell et al (1996) in the following ways:

i) it eliminates the arbitrary choice of clustering either the emergent or the implicit pole of a grid by proposing the combined form of clustering, which stays true to the way the participants actually rate their elements in relation to their constructs.

ii) it introduces ratings in the analysis so that the data analysis stays closer to the rated grid data.

iii) it triangulates different methods of analyzing grid data (by providing comparisons between the GRIDSTAT and the TUCKER-HICLAS programmes).

iv) it provides additional information concerning the strength of association between element and construct classes.

Pythagorean distances

A comparison between the mean Pythagorean distance of the traumatic element from the rest of the elements ($M = 6.06$, $SD = 1.24$) and the mean Pythagorean distance between all the rest of the elements ($M = 5.69$, $SD = 0.92$) revealed that the traumatic event was construed as significantly more distant from the rest of the events ($t(35) = 2.59$, $p = .018$). The present study found no significant correlation between the trauma-distance measure and any of the questionnaire measures employed.

Extremity ratings

A comparison was made between the mean extremity score (1s and 6s on the grid's six point rating scale) of the trauma element ($M = 11.66$, $SD = 3.18$) and the mean extremity score of the rest of the events ($M = 7.49$, $SD = 2.60$), revealing that the traumatic event was construed more extremely than the rest of the events ($t(35) = 7.92$, $p = .0001$). No significant correlations were found between the following two measures and the questionnaire scores: i) extremity of the trauma element and ii) overall percentage of extremity.

Conflict measures

A comparison was made to evaluate the difference between the mean percentage of conflict attributed to the traumatic event ($M = 7.17$, $SD = 1.27$) and the mean percentage of conflict attributed to the rest of the events ($M = 6.62$, $SD = 0.88$). The comparison revealed that on average the traumatic event contained a significantly larger amount of conflict than the rest of the events ($t(35) = 2.45$, $p = .021$).

Also, the conflict in participants' grids was found to be: i) negatively correlated with the re-experience subscale of the PTSD Symptom Scale (PSS) ($r = -.491$, $p = .003$); ii) negatively correlated with the Impact of Events Scale (IES) ($r = -.33$, $p = .050$) and its Avoidance subscale ($r = -.34$, $p = .043$).

Construct valence measures

There was found to be a significant difference in the number of times participants assigned negative valence on the emergent pole ($M = 7.76$, $SD = 2.28$) compared to the number of times negative valence was assigned to the implicit pole of

the grids ($M = 4.91$, $SD = 1.56$), $t(33) = -5.13$, $p = .0001$ (Note: the fewer number of degrees of freedom here is due to the fact that two participants were not asked to provide any valence information). Furthermore, the number of times the emergent pole was assigned negative valence correlated positively with the following scales: i) the PSS ($r = .45$, $p = .008$) and its Re-experience subscale ($r = .45$, $p = .008$) and Arousal subscale ($r = .37$, $p < .03$); ii) the BDI scale ($r = .37$, $p = .03$); iii) the BAI scale ($r = .48$, $p = .006$); iv) and the IES ($r = .41$, $p = .01$) and its Intrusion subscale ($r = .50$, $p = .002$).

There were also significant negative correlations between the overall number of times participants used the mixed positive and negative valence, independently of a pole, and the following scales: i) the PSS ($r = -.40$, $p = .019$) and its Re-experience subscale ($r = -.59$, $p = .0001$); ii) the BAI ($r = -.37$, $p = .038$); iii) the IES ($r = -.46$, $p = .007$) and its Intrusion subscale ($r = -.61$, $p = .0001$).

Finally, there were significant positive correlations between the overall number of negative valences found in a grid and the following scales: i) the PSS ($r = .44$, $p = .01$) and particularly its Re-experience subscale ($r = .65$, $p = .0001$); ii) the BAI ($r = .52$, $p = .002$); iii) the IES ($r = .42$, $p = .01$) and its Intrusion subscale ($r = .54$, $p = .001$).

Principal components

As a measure of how tightly organized and uni-dimensional is the participants' construing, the percentage of variance accounted by the first principal component was taken into account. It was found that there were significant positive correlations between this measure and the following scales: i) the PSS ($r = .42$, $p = .01$) and its Avoidance subscale ($r = .45$, $p = .006$); ii) the Intrusion subscale of the IES ($r = .34$, $p = .046$).

Table 2.4: Pearson Product-Moment correlations between repertory grid and questionnaire measures (N=36).

Measures	<u>Over.Neg.</u>	<u>Over.±</u>	<u>Neg.Emer.</u>	<u>Over.Conf.</u>	<u>1st Comp.</u>	<u>Var.Inten.</u>
PTSD	.44**	-.40*	.45**	-.24	.42*	-.37*
Re-exper. avoidance	.65**	-.59**	.45**	-.49**	.23	-.33
arousal	.25	-.26	.33	-.19	.45**	-.30
BDI	.20	-.13	.37*	-.00	.27	-.33*
BAI	.29	-.33	.37*	.03	.27	-.35*
IES	.52**	-.37*	.48**	-.10	.30	-.18
intrusion avoid.	.42*	-.46**	.41*	-.33*	.22	.00
GHQ	.54**	-.61**	.50**	-.22	.34*	-.16
	.19	-.19	.21	-.34*	.05	.16
	.26	-.26	.16	.17	.19	-.23

Over.Neg. = overall number of negative valence construct poles; Over.± = overall mixed valence construct poles; Neg.Emer. = number of negative emergent poles; Over.Conf. = overall percentage of conflict; 1st Comp. = percentage of variance accounted by first principal component; Var.Inten. = variability of intensity. * p<.05 - ** p<.01

Variability of Intensity

This measure of a personal construct system's elaboration was found to be significantly negatively correlated with the following scales: i) the PSS ($r = -.37$, $p = .026$) and its Arousal subscale ($r = -.33$, $p = .048$); ii) the BDI ($r = -.35$, $p = .037$).

A summary of the above results can be seen in Tables 2.4 and 2.5. It should be mentioned that the following variables were not found to be significantly correlated with any of the scales: i) time since trauma; ii) current age; iii) midpoint grid ratings iv) extreme ratings v) extreme trauma ratings and vi) Pythagorean distance of the trauma event from the rest of the events.

Table 2.5: Significant differences found amongst repertory grid measures via T-test.

Trauma Pythagorean distance (M = 6.06, SD = 1.24)	t(35) = -2.59, p = .018	Non-trauma Pythagorean dist. (M = 5.69, SD = 0.92)
Trauma extremity (M = 11.66, SD = 3.18)	t(35) = 7.92, p = .0001	Non-trauma extremity (M = 7.49, SD = 2.60)
Trauma conflict (M = 7.17, SD = 1.27)	t(35) = 2.45, p = .021	Non trauma conflict (M = 6.62, SD = 0.88)
Negative emergent pole (M = 7.76, SD = 2.28)	t(33) = -5.13, p = .0001	Negative implicit pole (M = 4.91, SD = 1.56)

Sex differences

In order to consider possible differences between male and female patients the original sample was split into two gender groups (males =18, females = 18). Correlations conducted between repertory grid and questionnaire measures revealed some differences amongst the two groups (see Table 2.6).

Overall, there were found to be more significant correlations between grid and questionnaire measures among women than men, 22 to 8 respectively.

Of particular interest are those sections of Table 2.6 where there appear to be correlations exclusively for one sex only. In that respect, the correlations between “time since trauma” and the PTSD scale along with the two of its subscales (avoidance and arousal) seem to apply exclusively to men. Correlations failed to achieve significant values for the female group in that section even after normalizing two extreme values in the data set. The extreme values in these two cases represented childhood sexual abuse trauma, which is far more common in women than in men (Kessler et al, 1995). This finding seems to suggest that PTSD symptoms in women are more persistent than in men and there is evidence in the literature supporting this claim (Nemeroff et al, 2006). The finding also suggests that the passage of time seems to alleviate specific aspects of trauma symptoms in men, especially those of arousal and avoidance, but has no significant effect on symptoms of depression, anxiety and the related symptom of intrusion.

Table 2.6: A comparative presentation of Pearson Product-Moment correlations between repertory grid and questionnaire measures for male (N = 18) and female (N = 18) patients (Note: See Appendix F for the total correlational data of the two groups)

Measures	<u>Ov.Neg.</u>	<u>Over. ±</u>	<u>Neg.Em</u>	<u>Ov.Con.</u>	<u>1st Com.</u>	<u>Var.Int.</u>	<u>T.S.T</u>
PTSD							[-.55*]
re-exper.	(.61**)	(-.55**)	(.63**)		(.63**)		
avoidan.	(.70**)	(-.66**)	(.56**)	(-.54*)	(.47*)		
arousal	(.52*)	(-.51*)	(.59**)				[-.58*]
BDI			(.43*)		(.64**)		[-.48*]
BAI			(.45*)		(.46*)		
IES	(.48*)		[.59*]		(.47*)		
intrusion		[-.55*]		(-.49*)			
avoidan.	(.42*)	(-.43*)					
GHQ	[.65**]	[-.81**]	[.73**]	(-.46*)			

Ov.Neg. = overall number of negative valence construct poles; Over.± = overall mixed valence construct poles; Neg.Em. = number of negative emergent poles; Ov.Con. = overall percentage of conflict; 1st Com. = percentage of variance accounted by first principal component; Var.Int. = variability of intensity; T.S.T = time since trauma; (female scores); [male scores]; * p<.05 - ** p<.01

Another gender specific area in Table 2.6 is the one relating to the percentage of variance accounted by the first principal component, which seems to have a quite wide-ranging negative effect on women's post-traumatic symptoms. So, a relatively tight and uni-dimensional form of construing, as represented by a high first component, seems to increase the core posttraumatic symptoms as well as comorbid conditions such as depression and anxiety in women but not so much in men.

A surprising finding is that the overall amount of conflict in a grid seems to be inversely related to posttraumatic symptoms in women. Since, as shown earlier in this study (see Table 2.5), trauma seems to have significantly more conflict attached to it when compared to the rest of the events/elements in a grid, we would expect a positive rather than a negative correlation between conflict and PTSD. One possible explanation is that the overall conflict index in a grid is conducive to psychological health but conflict specifically related to trauma is not.

Finally, another set of observations concerns the mixed-gender areas, in the first three valence related columns of Table 2.6, where we can see that correlations are more spread among women, covering more scales, while in men the correlations seem to concentrate in one specific area, which is mostly that of the intrusion subscale of IES. That means that having a negative or a more black and white view of the world has more widespread effects among women than in men. Also, that the same cognitive style specifically increases intrusion symptoms in men who suffer from posttraumatic stress.

2.3.2. Post-therapy data analysis

As presented in the Method section there were three outcome groups: i) successful (group 1); ii) unsuccessful (group 2); and iii) partially improved (group 3), which are going to be individually considered here.

Group 1: The successful outcome group

Table 2.7 summarizes some of the clients' information of the successful outcome group. It was a uniformly female group characterized by different types of traumatic experiences.

Table 2.7: Some characteristics of the successful outcome group (group 1).

<u>Clients</u>	<u>Sex</u>	<u>Age</u>	<u>Therapy sessions</u>	<u>Type of therapy</u>	<u>T.S.T (in months)</u>	<u>Type of trauma</u>
(C1)	Female	28	16	CBT	24	Attack
(C2)	Female	46	28	EMDR	36	Car accident
(C3)	Female	52	14	CBT	24	Hearing about a suicide
(C4)	Female	31	18	CBT	60	Rape

T.S.T = Time since trauma

Three patients received cognitive behavioural therapy (CBT) and one had eye movement desensitization and reprocessing therapy (EMDR). The repertory grid outcome measures (Table 2.8) represent a picture of change that is not uniformly consistent with some of personal construct theory's assumptions. Each one of the repertory grid measures is presented below:

i) Variability of intensity: this measure was expected to increase in the successful outcome since higher levels of variability indicate more elaborated construct systems, which in turn characterize better psychological adaptation. The results show that although that occurred in the majority of the cases (3 out of 4), in one case (C3), however, the variability seems to have decreased and in another the increase is actually very small (C1).

ii) First principal component: this measure is thought to provide an indication of how tightly or uni-dimensionally a person construes their experiences. As expected, the group had a relatively high percentage of their grids' variance accounted by the first component since traumatic experiences are often characterized by high levels of anxiety

Table 2.8: A comparative presentation of pre and post-therapy repertory grid measures in the successful outcome group (group 1).

Clients	Var.Int.	1 st Com.	Trm.Con.	Over. ±	Over.Neg.	Euc.Dis.	Pred.
C1:Pre-therapy	.23	49.7	8	7	10	5.8	Equ.
C1: Post-therapy	.24 §	73.5 !!	7.3 §	2 !!	14 !!	4.5 §	Sup.!!
C2: Pre	.23	75.4	7.9	3	15	5.5	Sup.
C2: Post	.26 §	69.9 §	8.2 !!	6 §	10 §	5.3 §	Frag.§
C3:Pre	.29	65.8	9.6	7	9	5.7	Sup.
C3: Post	.25 !!	58.8 §	8.7 §	-	-	7.6 !!	Sup.!!
C4: Pre	.21	72.2	6.2	5	12	7.1	Sup.
C4: Post	.35 §	61.2 §	5.5 §	2 !!	15 !!	4.5 §	Sup.!!

§ = Expected result; !! = unexpected result; Var.Int = Variability of intensity; 1st Com. = 1st principal component; Trm.Con. = Trauma conflict; Over. ± = Overall number of positive and negative (mixed) pole valence; Over.Neg. = Overall number of negative pole valence; Euc.Dis. =

Pythagorean distance of the traumatic element from the rest of the elements; Pred. = Predictive value of the trauma element according to GRIDSTAT analysis; Sup. = Superordinate; Equ. = Equal; Frag. = Fragmented.

that lead to a tightening of construing, which functions as a type of psychological defence. In three out of four cases the first component decreased post-therapy. In C1 there was the exact opposite trend, where the first component was substantially increased after therapy. This result is not necessarily opposite to theory though, since tightening and loosening are regarded as regularly alternating phases in a person's construing (Kelly, 1955).

iii) Trauma conflict: the expected decrease of conflict/elaboration in the trauma element post-therapy took place in the majority of the cases with the only exception of case C2 where the trauma conflict actually increased. As will be argued later on, conflict/elaboration should not be seen as an absolute measure because not only the degree of conflict/elaboration but also what gets elaborated and how should be taken into account in order for a complete picture to emerge.

iv) Overall number of mixed (positive and negative) valence poles: since there were found to be negative correlations between this measure and most of the scales used in this study (see Table 2.4), it was hypothesized that successful therapeutic outcome would bring an increase in the number of the mixed valence poles. A comparison between a clinical PTSD and a normal sample also revealed that the PTSD patients assigned significantly less often mixed valence to the construct poles (Sewell et al, 1996). In the majority of cases, two out of three since there were missing data for one participant, patients increased the number of mixed valence construct poles after therapy while in one there was actually a substantial decrease (from 7 to 2, in C1).

v) Overall number of negative valence poles: this measure showed significant positive correlations with most of the scales (Table 2.4) and thus the hypothesis was that a successful outcome would be related to a reduction in this measure. Here the majority of cases, two out of three as in the previous measure, showed an increase in the number of negative valence poles after therapy, which is contrary to our hypothesis.

vi) Pythagorean distances: for this measure the conjecture was that since the trauma element was found to be significantly distant from the rest of the events (see Table 2.5) at the pre-therapy assessment this distance would reduce after a successful outcome. Other studies have also found that the traumatic event is construed by PTSD patients as less similar to non-trauma events than the non-trauma events from each other (Quaite, 2004; Sewell, 1996; Sewell et al, 1996; Winter & Gould, 2000). Results confirmed the prediction in the majority of the cases, three out of four, but in C3 the distance appeared to increase dramatically after therapy (from 5.7 to 7.6), which is counterintuitive.

vii) GRIDSTAT's superordinacy measure: since this is a newly applied measure in PTSD research there is an absence of comparative data and for that reason the conjecture made here was based exclusively on the results of the present study. Since the findings from the TUCKER-HICLAS and GRIDSTAT analyses in this study pointed to the exact opposite direction suggested by the personal construct model of PTSD (Sewell et al, 1996), in other words that the traumatic event is superordinate instead of subordinate in regard to a comparison non-trauma event, the present study hypothesized that successful therapy outcome would result in the trauma event becoming less superordinate/predicting after therapy (in GRIDSTAT terms becoming either "equal" or "subordinate-predicted" or even "fragmented" after therapy).

From the small number of cases considered in this study there could not be a discernible pattern agreeing with either the author's or alternatively Sewell et al's hypothesis. The GRIDSTAT analysis revealed that in two cases (C3 & C4, Tab.2.8) the superordinate status of the trauma event at the pre-therapy assessment remained the same post-therapy. In one case (C2) trauma's superordinate status became fragmented after therapy, which could be seen as supportive of the author's hypothesis. Finally, in C1 the equal status of trauma at pre-therapy became superordinate post-therapy.

The picture becomes even more complicated, however, when we consider the pre and post-therapy results from the TUCKER-HICLAS analysis. It should be mentioned, however, that a comparison between the TUCKER-HICLAS and GRIDSTAT superordinacy measures could not be readily made since in the former analysis the status of the traumatic event derives from comparison with a non-trauma event while in the latter there is no such a comparison.

Table 2.9 presents the TUCKER-HICLAS results, which can show the changes in both the elaboration index (EI) and the strength of association (SA) of the trauma and non-trauma elements after therapy. In C1 the EI as well as the SA were the same before and after therapy. C4's EI and SA both were reduced after therapy but remained at the same level compared to the non-trauma event. In C2 and C3 the EI of the traumatic event was bigger than the comparison non-trauma event and remained so after therapy. The SA of the trauma event remained the same in C3 and in C2 it was relatively reduced since there was an increase in the SA of the non-trauma event.

Due to the small number of post-therapy cases the present data cannot confirm a definite pattern in the direction of change regarding the elaboration index and the strength of association indices of the trauma event as measured via TUCKER-HICLAS (Table 2.9).

Table 2.9: Pre and post-therapy comparisons between the trauma and the non-trauma event in terms of their elaboration index as estimated by TUCKER-HICLAS (the successful outcome group)

<u>Clients</u>	<u>Pre.Traum.El.</u>	<u>Pre.Com.El.</u>	<u>Post.Traum.El.</u>	<u>Post.Com.El.</u>
C1	4 (str.3)	4 (str.3)	4 (str.3)	4 (str.3)
C2	3 (str.3)	2 (str.2)	7 (str.3)	4 (str.3)
C3	5 (str.3)	3 (str.2)	8 (str.3)	4 (str.2)
C4	4 (str.3)	4 (str.3)	2 (str.1)	2 (str.3)

Note: the numbers in brackets represent the strength of association between the element and construct classes

Group 2: The unsuccessful outcome group

The unsuccessful outcome group was a uniformly male group with different types of trauma (Table 2.10). Two clients received cognitive behaviour therapy (CBT) and one eye movement desensitization and reprocessing therapy (EMDR).

Table 2.10: Some characteristics of the unsuccessful outcome group (group 2).

<u>Clients</u>	<u>Sex</u>	<u>Age</u>	<u>Therapy sessions</u>	<u>Type of therapy</u>	<u>of T.S.T (in months)</u>	<u>Type of trauma</u>
(C5)	Male	39	21	CBT	24	Torture
(C6)	Male	25	11	CBT	48	Car accident
(C7)	Male	28	7	EMDR	48	Attack

T.S.T = Time since trauma

The repertory grid outcome measures of the unsuccessful group (Table 2.11) represent a picture of change that appears to be more consistent (percentage of agreement 76.3), compared to the successful outcome group measures (percentage of agreement 57.6), with the assumptions of personal construct theory. In the present group, the measures that most consistently agreed with theoretical hypotheses were those of pole valences and the Pythagorean distance measure.

Table 2.11: A comparative presentation of pre and post-therapy repertory grid measures in the unsuccessful outcome group (group 2).

<u>Clients</u>		<u>Var.Int.</u>	<u>1st Com.</u>	<u>Tr.Con.</u>	<u>Over. ±</u>	<u>Over.Neg.</u>	<u>Euc.Dis.</u>	<u>Pred</u>
C5:	Pre-	.28	72.8	7.9	-	-	5.8	Sup
therapy								
C5: Post		.21 §	64.6 !!	6.4 !!			6.3 §	Eql. !!
C6: Pre		.32	61.7	8.3	10	8	6.3	Sup
C6: Post		.23 §	80.8 §	5.8 !!	5 §	11 §	6.8 §	Sup §
C7: Pre		.23	77.4	7.6	5	11	6.7	Sup
C7: Post		.25 !!	83.2 §	8.8 §	2 §	15 §	10.1 §	Sup §

§ = Expected result; !! = unexpected result; Var.Int = Variability of intensity; 1st Com. = 1st principal component; Tr.Con. = Trauma conflict; Over. ± = Overall number of positive and negative (mixed) pole valence; Over.Neg. = Overall number of negative pole valence; Euc.Dis. = Pythagorean distance of the traumatic element from the rest of the elements; Pred. = Predictive value of the trauma element according to GRIDSTAT analysis; Sup. = Superordinate; Eql. = Equal; Frag. = Fragmented.

The TUCKER-HICLAS analysis (Table 2.12) cannot reveal, as in the case of the successful outcome group, a definite pattern in the direction of change after therapy mainly due to the small number of cases.

Table 2.12: Pre and post-therapy comparisons between the trauma and the non-trauma event in terms of their elaboration index as estimated by TUCKER-HICLAS (the unsuccessful outcome group).

<u>Clients</u>	<u>Pre.Traum.El.</u>	<u>Pre.Com.El.</u>	<u>Post.Traum.El.</u>	<u>Post.Com.El.</u>
C5	4 (str.3)	3 (str.2)	4 (str.2)	4 (str.2)
C6	2 (str.3)	5 (str.3)	3 (str.3)	2 (str.3)
C7	5 (str.1)	5 (str.3)	3 (str.2)	4 (str.2)

Note: the numbers in brackets represent the strength of association between the element and construct classes

Group 3: Partially improved group

The partially improved outcome group consists of two males with different types of traumas who both received eye movement desensitization and reprocessing therapy (EMDR) as shown in Table 2.13. For this group, unlike the previous two in which there was a clear improvement or worsening of patients' symptoms, there will be no prediction regarding the changes in the post-therapy grid measures. There are two clear indications, however, that patients improved in some respect but deteriorated in another (see Table 2.14): i) there seems to be a positive change as can be seen in the increase of the variability of intensity measure indicating a move towards greater elaboration of the construct system; ii) there seems to be a negative change regarding the increase of the Pythagorean distance between the trauma and the rest of the events post therapy. This means that the trauma event is still perceived by the patients as more dissimilar than the rest of the events, and thus as more isolated within psychological space.

Table 2.13: Some characteristics of the partially improved outcome group (group 3).

<u>Clients</u>	<u>Sex</u>	<u>Age</u>	<u>Therapy sessions</u>	<u>Type of therapy</u>	<u>T.S.T (in months)</u>	<u>Type of trauma</u>
(C8)	Male	48	59	EMDR	10	Car accident
(C9)	Male	38	8	EMDR	36	Witnessing suicide

T.S.T = Time since trauma

Regarding the results from the TUCKER-HICLAS analysis (Table 2.15) we can see that in both patients the trauma appears as superordinate before therapy, and, after therapy it appears as equal in one case (C8) and as still superordinate in the other (C9).

Table 2.14: A comparative presentation of pre and post-therapy repertory grid measures in the partially improved outcome group (group 3).

Clients	Var.Inten.	1 st Com.	Trm.Con.	Over. ±	Over.Neg.	Euc.Dis.	Pred
C8: Pre	.24	65.8	7.8	4	13	5.6	Equ
C8: Post	.27	72.3	8.4	0	15	6.8	Equ
C9: Pre	.16	37.1	6	6	12	5.3	Equ
C9: Post	.33	63.8	7.2	6	11	5.6	Equ

Var.Int = Variability of intensity; 1st Com. = 1st principal component; Trm.Con. = Trauma conflict; Over. ± = Overall number of positive and negative (mixed) pole valence; Over.Neg. = Overall number of negative pole valence; Euc.Dis. = Pythagorean distance of the traumatic element from the rest of the elements; Pred. = Predictive value of the trauma element according to GRIDSTAT analysis; Sup. = Superordinate; Equ. = Equal; Frag. = Fragmented.

As regards the strength of association of the trauma event this becomes weaker in one case (C8) and it remains the same in the other (C9).

Table 2.15: Pre and post-therapy comparisons between the trauma and the non-trauma event in terms of their elaboration index as estimated by TUCKER-HICLAS (the partially improved outcome group).

Clients	Pre.Traum.El.	Pre.Com.El.	Post.Traum.El.	Post.Com.El.
C8	4 (str.3)	2 (str.3)	3 (str.2)	3 (str.2)
C9	4 (str.3)	3 (str.3)	3 (str.3)	2 (str.3)

2.3.3 Content analysis of constructs

The constructs from each individual grid for the successful and the unsuccessful outcomes only were classified according to their content. The author did the initial classification of content and subsequently a research colleague (RC) performed a check in order for inter-coder reliability to be established. The reader can also check the categorization of constructs in Appendix A, where the inter-coder agreement is mentioned for each individual grid (overall agreement 94.9%). The number of constructs contained in each category from the pre- and post therapy grids were then represented in a bar graph in order to assist comparisons between the grids.

The successful cases

The case of C1

As can be seen in Figure 2.5, C1 seems to have reduced the number of construct categories she used in her post-therapy grid ($n=7$) in regard to her pre-therapy one ($n=5$). There is also the addition of the “Evaluation” construct category and a large increase in the “Personal growth” category in the post-therapy grid.

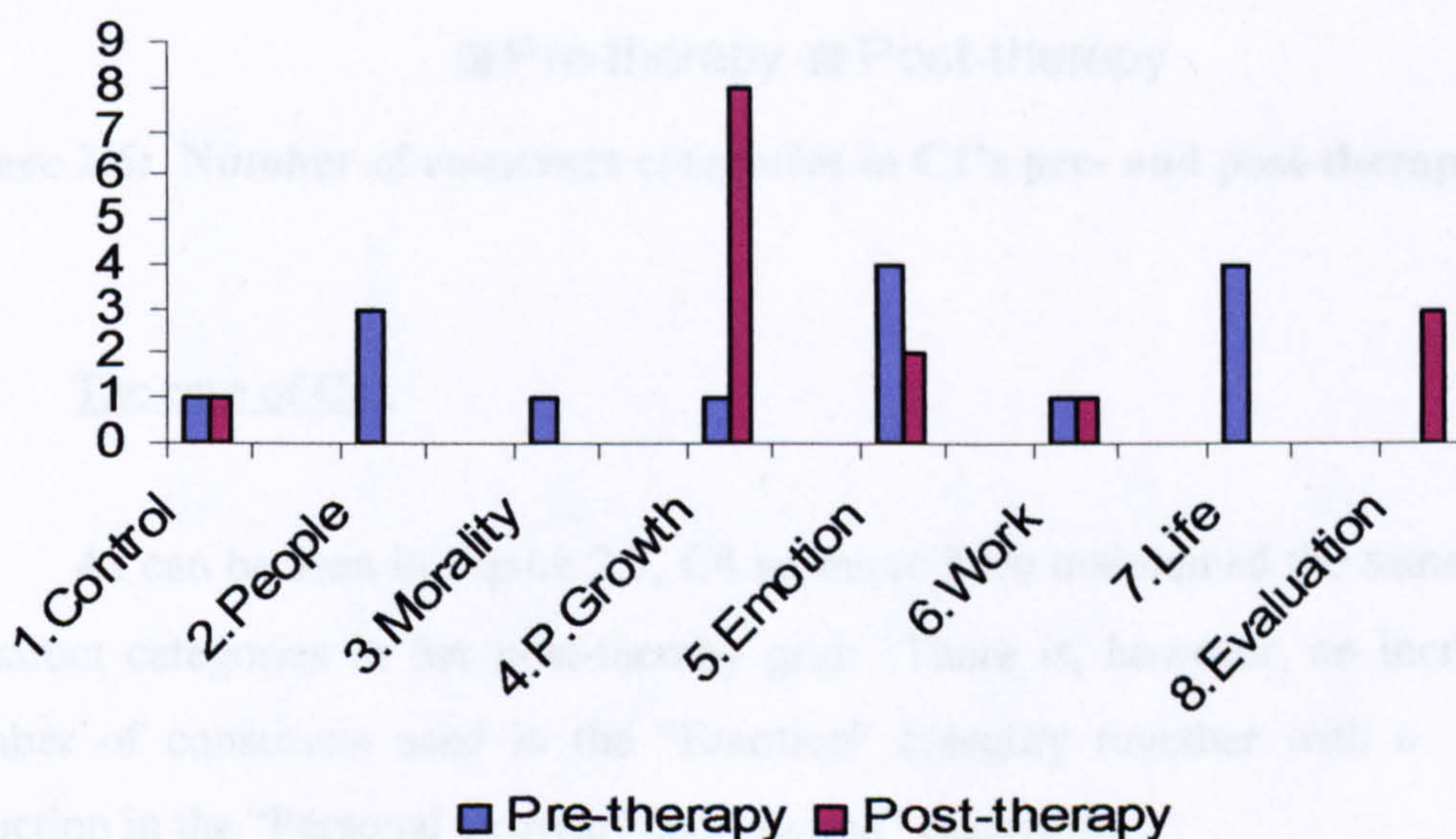


Figure 2.5: Number of construct categories in C1's pre- and post-therapy grids.

The case of C2

As can be seen in Figure 2.6, C2 seems to have also reduced, as in C1's case, the number of construct categories she used in her post-therapy grid ($n=7$) in regard to her pre-therapy one ($n=3$). C2 seems to have dramatically increased her “Personal growth” category, similarly to C1.

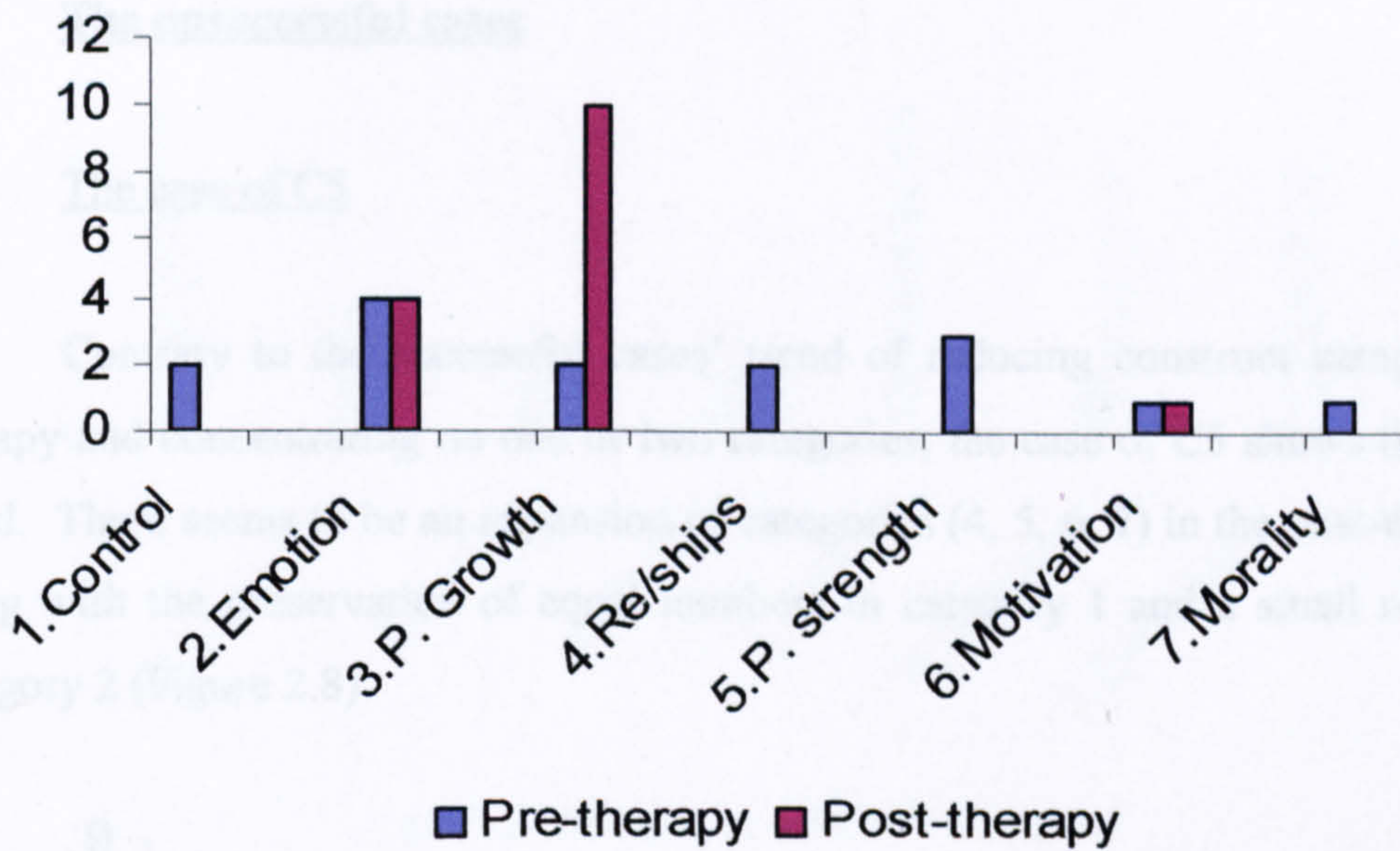


Figure 2.6: Number of construct categories in C1's pre- and post-therapy grids.

The case of C4

As can be seen in Figure 2.7, C4 seems to have maintained the same number of construct categories in her post-therapy grid. There is, however, an increase of the number of constructs used in the “Emotion” category together with a very small reduction in the “Personal Growth” and “Action” categories.

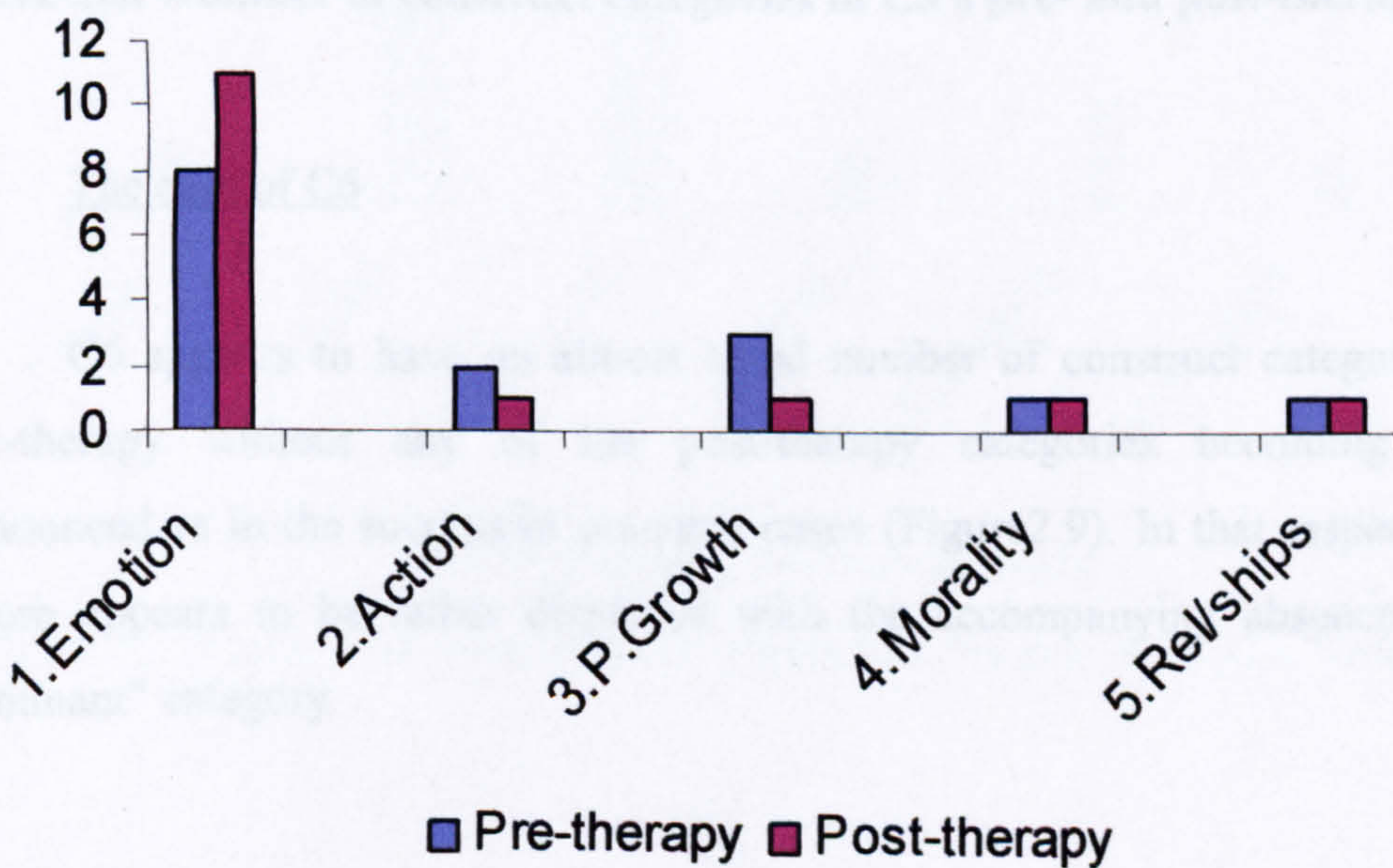


Figure 2.7: Number of construct categories in C4's pre- and post-therapy grids.

The unsuccessful cases

The case of C5

Contrary to the successful cases' trend of reducing construct categories after therapy and concentrating on one or two categories, the case of C5 shows the opposite trend. There seems to be an expansion of categories (4, 5, 6, 7) in the post-therapy grid along with the preservation of equal numbers in category 1 and a small reduction in category 2 (Figure 2.8).

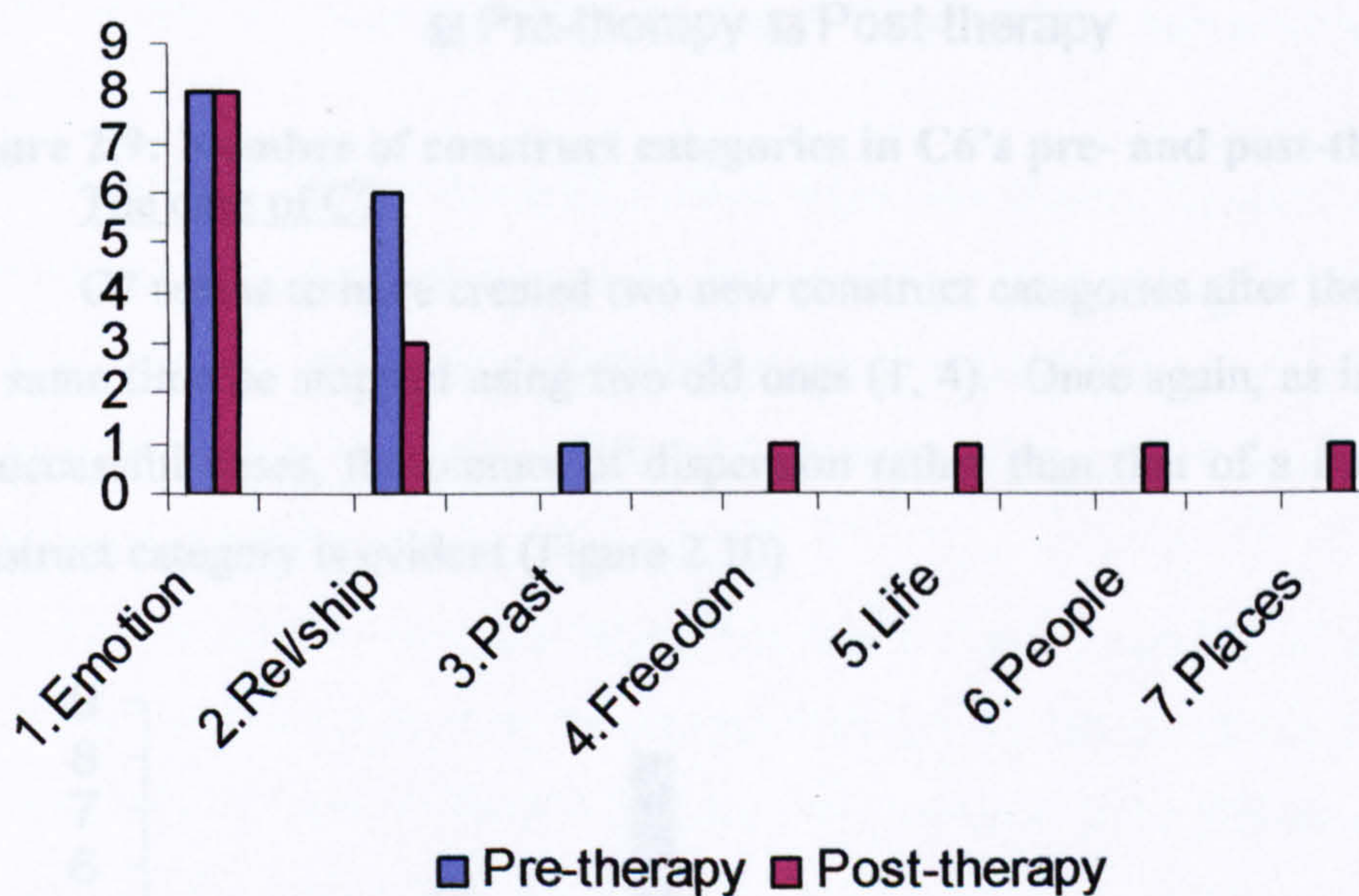


Figure 2.8: Number of construct categories in C5's pre- and post-therapy grids.

The case of C6

C6 appears to have an almost equal number of construct categories pre- and post-therapy without any of the post-therapy categories becoming exclusively pronounced as in the successful outcome cases (Figure 2.9). In that respect the overall picture appears to be rather dispersed with the accompanying absence of a single "dominant" category.

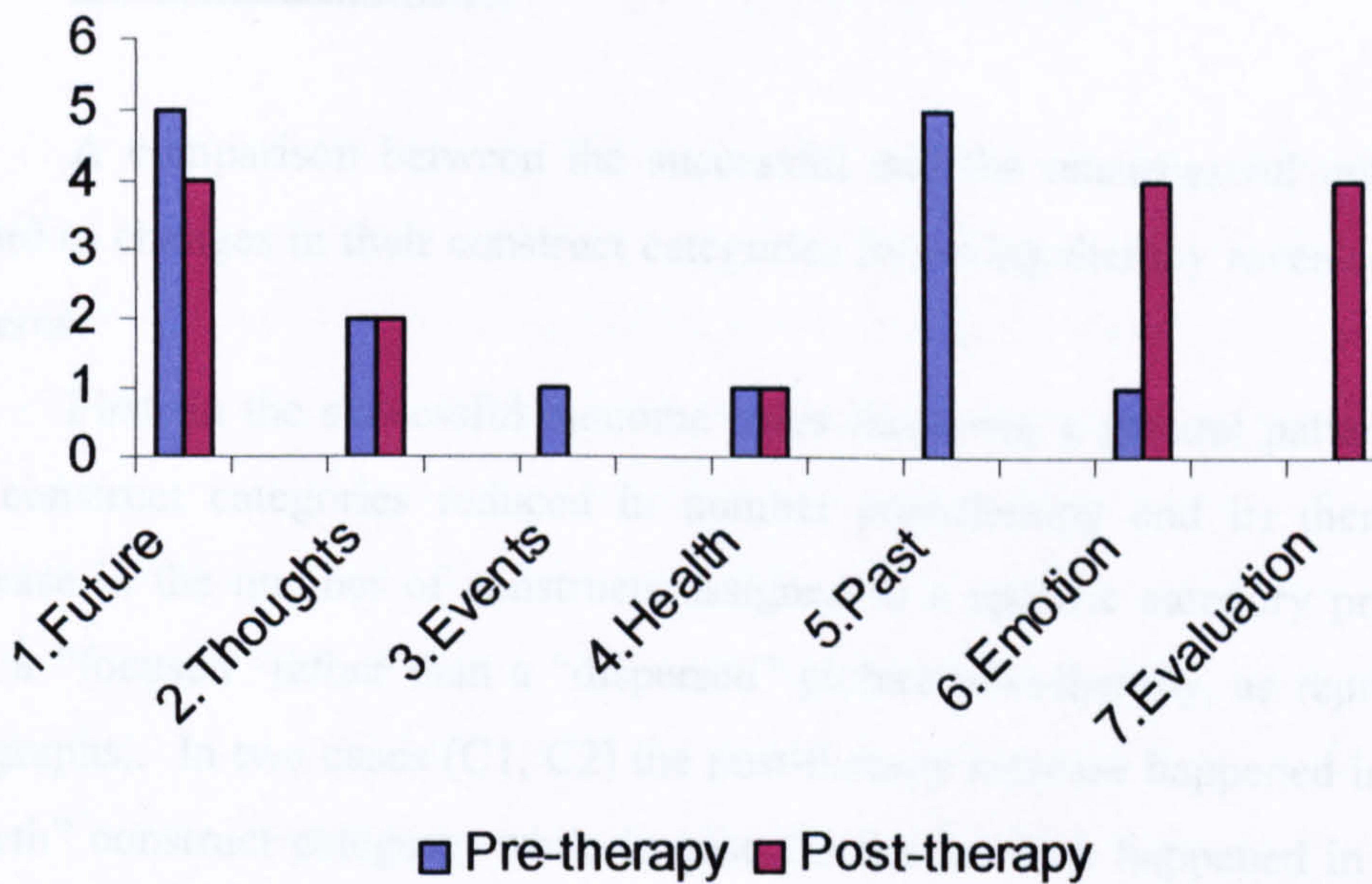


Figure 2.9: Number of construct categories in C6's pre- and post-therapy grids.
The case of C7

C7 seems to have created two new construct categories after therapy (5, 6) but at the same time he stopped using two old ones (1, 4). Once again, as in all the previous unsuccessful cases, the picture of dispersion rather than that of a focus on a specific construct category is evident (Figure 2.10)

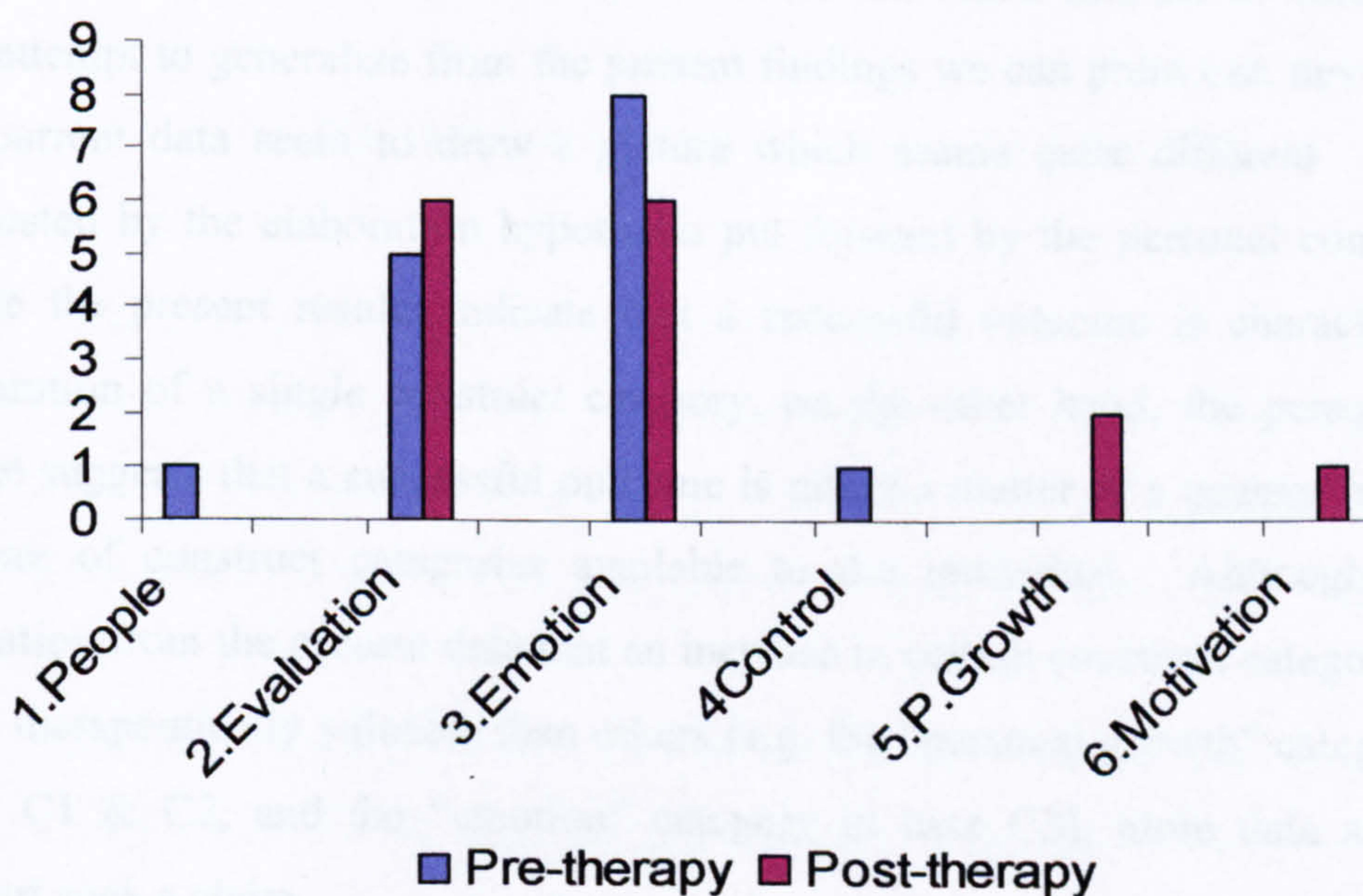


Figure 2.10: Number of construct categories in C7's pre- and post-therapy grids.

Concluding remarks

A comparison between the successful and the unsuccessful outcome cases in regard to changes in their construct categories following therapy revealed the following patterns.

First, in the successful outcome cases there was a general pattern in which: i) the construct categories reduced in number post-therapy and ii) there was a large increase in the number of constructs assigned to a specific category providing in this way a “focused” rather than a “dispersed” picture post-therapy, as represented by the bar graphs,. In two cases (C1, C2) the post-therapy increase happened in the “personal growth” construct category, while in case C3 the increase happened in the “emotion” category.

Second, in the unsuccessful cases there was almost the exact opposite pattern compared to the successful outcome: i) there was no any large increase in a single construct category and ii) the number of constructs either increased or remained overall the same after therapy, giving in this way a “dispersed” rather than a “focused” picture as it appears in the bar graphs.

Taking into account the limitations that the small number of cases imposes on any attempt to generalize from the present findings we can point out, nevertheless, that the current data seem to draw a picture which seems quite different from the one suggested by the elaboration hypothesis put forward by the personal construct model. While the present results indicate that a successful outcome is characterized by an elaboration of a single construct category, on the other hand, the personal construct model suggests that a successful outcome is rather a matter of a general increase in the number of construct categories available to the individual. Although there is an indication from the present data that an increase in certain construct categories might be more therapeutically valuable than others (e.g. the “personal growth” category found in cases C1 & C2, and the “emotion” category in case C3), more data are needed to support such a claim.

2.4. DISCUSSION

This study set out to empirically test and conceptually develop the personal construct model of post-traumatic stress disorder (Sewell et al, 1996). A main focus was to investigate the so-called elaboration hypothesis, which is the foundation of the entire model. The study intended to test, among other things, whether traumatic events experienced by a mixed-trauma outpatient population diagnosed with PTSD could differ in regard to their degree of elaboration when compared to non-traumatic events. The study explored and critiqued the basic assumptions underpinning the measure of elaboration and proposed new methods as well as technologies for estimating it.

Overall, the study did not find any support for the low elaboration hypothesis on which Sewell and his colleagues (1996) based their model of PTSD. Moreover, this study showed that the methodology used to support the low elaboration hypothesis was fundamentally flawed. Data from the present study seem to support the exact opposite hypothesis as regards the level of trauma elaboration, namely that trauma appears to be more elaborated compared to non-trauma events and to generally occupy a more superordinate position within the conceptual structure of a traumatized individual.

2.4.1. The HICLAS elaboration index demystified

In order to account for the HICLAS results we need to take into account another grid measure, namely that of the construct valence. As shown in the Results section, there was a significant difference in the number of times PTSD patients assigned negative valence to the emergent pole of constructs as compared to the implicit pole ($p = .0001$).

Since the traumatic event is a negative element it follows that participants would assign it less often to the more positive implicit pole and more often to the more negative emergent pole. It becomes obvious then that whenever the HICLAS configuration clusters the implicit pole (0-1 clustering) the traumatic event will appear less elaborated compared to a non-traumatic positive event; hence Sewell et al's finding that trauma is less elaborated when compared to a non-trauma event. Based on the same principle, and as results revealed in this study, when HICLAS clusters the emergent

pole (1-0 clustering) the trauma event appears significantly more elaborated than the comparison non-trauma event. As explained earlier, since trauma is a negative element participants are bound to assign it more often to the more negative emergent pole, hence the higher level of elaboration.

When the method of combining the two types of clustering together (1-0/0-1), proposed by the author (Sermpezis & Winter, 2006), was used to calculate the elaboration index the results from the present study showed no significant difference in the level of elaboration between the trauma and non-trauma events as expected. In this case the combination of the two clustering types seemed to simply cancel the effects of each other out.

Further evidence for the above position was provided by the second stage of the HICLAS analysis in which the arrangement of the construct poles was changed in the original grids so that the emergent pole contained only negative valence poles and the implicit pole only positive valence poles. This new arrangement was originally designed in order to test whether by separating the poles in this way, making the predominantly negative emergent pole completely negative and making the less negative implicit pole completely positive, the effects found earlier would become more clear or pronounced.

As expected, the results were in accordance with the previous findings, in which the original construct-pole arrangement was used, only this time the effects were much more pronounced. Trauma appeared to be much less elaborated compared to the non-trauma event ($p = .0001$ compared to $p = .01$ in the normal arrangement) when the clustering of the implicit pole (0-1) was used. The exact opposite was the case when the clustering of the emergent pole (1-0) was used, with the trauma event appearing as considerably more elaborated than the non-trauma event ($p = .0001$ compared to $p = .04$ in the normal arrangement). Again, the use of the combined clustering (1-0/0-1) revealed no significant differences in the elaboration index between the trauma and non-trauma events.

On these grounds, it was concluded that earlier attempts to calculate the elaboration index via HICLAS (e.g. Moes, 1996, Sewell, 1996; Sewell et al, 1996) were based on methodologically unsound premises. The author attempted to overcome those methodological pitfalls by proposing the use of the combined clustering type which takes into account both construct poles. This new method was thought of as providing

an exact and complete representation of participants' construing choices by leaving no unaccounted data in the analysis as previous methods did.

New developments in HICLAS technologies have recently provided the choice of using ratings instead of binary data when conducting analysis on rated grids. The new TUCKER-HICLAS programme was used for the first time in the present thesis to analyse grids by preserving the original grid ratings.

The TUCKER-HICLAS analysis, using the combined clustering form with ratings, revealed that the trauma element was significantly more elaborated than the comparison positive element. The extra measure of the strength of association provided by the programme revealed that the association between the trauma element and its construct classes was significantly stronger compared to that of the comparison element. These results point in the opposite direction to Sewell et al's proposed model, namely that the traumatic event is considerably more rather than less elaborated, has stronger connections with its associated construct classes and for that reason is superordinate rather than subordinate within the individual's conceptual structure.

Support for the above position was also supplied by the GRIDSTAT analysis in which in the majority of cases (69.4%) the trauma element appeared to be superordinate or predicting. It is important to also notice that the trauma element in no case appeared to be subordinate or predicted.

The results from the pre- and post-therapy comparisons, however, do not provide a clear picture regarding the changes occurring in the TUCKER-HICLAS and GRIDSTAT measures. To an extent this was expected due to the small number of cases in both the successful and unsuccessful outcome groups. For this reason larger samples will be needed to establish the direction of change in them that occurs as a result of therapy.

Finally, another measure which sought to explore changes between pre- and post-therapy grids was the content analysis performed on the grid constructs. Results indicated that the successful cases were characterized by, first, a reduction in the overall number of construct categories employed by the patients post-therapy and, second, a simultaneous large increase in the number of constructs belonging to a certain category, again in the post-therapy grids. In two out of three successful cases that increase took place within the "personal growth" construct category whereas in the other case it was in the "emotion" category. More research is warranted in this area in order to explore whether the increased number of constructs belonging in a certain construct category

after a successful outcome is content specific or alternatively is more idiosyncratic to the individual.

The unsuccessful cases presented with the opposite trend where the number of post-therapy construct categories seemed to either stay more or less the same, compared to pre-therapy, or alternatively increased in numbers giving in this way a more “diffuse” picture when compared with the more “focused” picture of the successful cases.

The above findings may suggest a much more complex picture of therapeutic movement according to which successful outcome does not simply depend on, either, an increase (as Sewell et al’s model would predict) or a decrease (as part of the findings from the present study may seem to suggest) of the construct classes/categories connected to the trauma event following therapy. It could well be the case (as the content analysis together with the GRIDSTAT and TUCKER-HICLAS analyses in this study revealed) that a successful outcome would be related to a decrease in the overall number of construct classes/categories employed by the patient in his/her construct system and a simultaneous increase in the number of constructs employed within a specific construct class/category.

2.4.2 Going beyond the superordinancy measures: what other grid measures seem to suggest.

First, the construct valence measures revealed a number of significant correlations with most of the questionnaire scales. The overall number of negatively assigned construct poles was positively correlated with the PTSD scales and specifically with their re-experiencing, arousal, and intrusion subscales while there appeared to be no correlations with any of the avoidance subscales (Table 2.4). This measure was also positively correlated with anxiety scores (BAI) while, more specifically, the number of negatively assigned emergent poles was in addition positively correlated with depression (BDI). Furthermore, the number of mixed valence construct poles produced significant negative correlations with the PTSD scales, specifically with the re-experience and intrusion subscales, as well as with anxiety (BAI). Excessively negative appraisals of the traumatic experience and/or its aftermath have been thought to produce a sense of current threat, which has a central role in both cognitive and constructivist theories of PTSD (Ehlers & Clark, 2000; Sewell et al, 1996).

Second, two measures of conceptual elaboration showed significant negative correlations with PTSD and depression indices. Specifically, the measure of the overall Conflict, which takes into account both construct and elements, showed significant negative correlations mainly with PTSD's avoidance and re-experiencing subscales. Although high conflict/elaboration denotes better psychological functioning the finding that the trauma event contained significantly more conflict, compared to the mean conflict of the rest of the events, seems counterintuitive (Table 2.5). As both cognitive and constructivist theories propose, the trauma event should be "poorly elaborated and inadequately integrated" (Ehlers & Clark, 2000, p. 325). It should be noted that the overall conflict measure showed significant negative correlations with PTSD symptoms only in the women's sample but not in men when the two sexes were tested separately. The variability of intensity measure, which shows the degree of differentiation between constructs, was found to be negatively correlated with PTSD and its arousal subscale as well as depression (Table 2.4). Considering that higher elaboration does not necessarily mean better psychological functioning, as the high elaboration of the trauma element revealed, we should rather see elaboration not as an absolute measure but in each case we should take into account other factors such as what is it that gets elaborated and how. In all probability, however, high elaboration of the overall conceptual structure seems to be functional rather than dysfunctional for the individual.

Third, the amount of variance accounted by the first principal component was found to be positively correlated with the overall PTSD score as well as with the avoidance and intrusion subscales. Tightening of construing, as a large first principal component seems to suggest, has been conceptualized as a response to an extreme and prolonged sense of threat (Sewell et al, 1996). Interestingly, this factor appeared to increase post-traumatic symptoms only in women but not in men in this study.

Fourth, the trauma event was found to be rated significantly more extremely compared to the rest of the events. The meaning of extremity has been disputed (see Bonarius, 1970; Hamilton, 1968) but the majority of researchers within personal construct theory seem to support the notion of extreme rating as indicative of cognitive rigidity very often linked to neurosis (Winter, 1992) or depression (Neimeyer, 1985). The counter-argument is that extremity is simply an indication of meaningfulness (O'Donovan, 1965). The present thesis supports a view of extreme ratings that combines both arguments together since, as the findings of this study suggest, trauma is a negative experience heavily invested in meaning that often leads to maladjustment.

Fifth, trauma was found to be construed as significantly more distant from the rest of the events when considering the measure of Pythagorean distance.

Finally, sex differences revealed that PTSD symptoms are more persistent in women than in men as other research seems to also suggest (Nemeroff et al, 2006). It was found that the passage of time post event seems to alleviate PTSD symptoms of arousal and avoidance in men but has no effect in women. As Porter and Birt (2001) have found, “women reported thinking about trauma more than men and provided more details in their memory accounts” (p. 109). These differences between the sexes could partly be explained in regard to gender difference in cognitive appraisal of stressors. Empirical evidence suggests that these differences do exist, with “females more likely to report threat and loss appraisals than men” and also that “women and men show different ‘control appraisals’, a type of appraisal which is a strong predictor of PTSD” (Olf, et al, 2004, p. 188).

2.4.3. A proposal of a radical alternative: towards a new personal construct model of PTSD.

What do all the currently established models of post-traumatic stress disorder have in common? It seems that all the main theoretical models that use cognition as their explanatory basis today share the common assumption that traumatic memories are in some fundamental way qualitatively different from non-traumatic or normal memories. It has been hypothesized that trauma memories are stored at a rather perceptual level (e.g. Brewin, 2001) which makes them less elaborated, more fragmented and less amenable to voluntary retrieval (Ehlers & Clark, 2000). Even more emphasized and fundamental, comprising the sole basis of the model, is the elaboration hypothesis within the current personal construct model of PTSD (Sewell et al, 1996). As Sewell and his colleagues have very eloquently put it, “the constructs that govern the very grammar of the [trauma] memory record are impaired” (Ibid, p. 81), meaning that there are fewer conceptual dimensions (i.e. constructs) connected to the traumatic event compared to non-traumatic events.

Is there any evidence that traumatic memories are no different from non-traumatic memories? Do the data of the present study support the thesis that traumatic memories are in any way impoverished, unelaborated and inaccessible by the subjects?

Both newly published research and the findings of this study seem to contrast markedly with the established clinical literature by suggesting that not only do trauma memories not differ qualitatively from everyday memories (e.g. Geraerts et al, 2007) but also that traumatic memories seem to be more rather than less elaborated when compared to non-traumatic memories. Also, as the results of the present study have shown, the strength of association between the trauma event and its related set of constructs seem to be stronger when compared to a non-traumatic positive event.

After reviewing the main clinical theories of PTSD, Berntsen, Willert, and Rubin (2003) concluded that the evidence supporting the claim that traumatic memories form incoherent narratives which remain mainly un-integrated into the overall life story of the patient is weak. What these authors argue is that when the findings from the clinical PTSD studies “are compared with findings on the phenomenology of autobiographical memories in general, it is no longer clear that trauma memories are fragmented, disintegrated and involve special memory processes” (Ibid, p. 677). As Gray & Lombardo (2001) explain, the currently held view about fragmented and disorganised trauma memories (FDTM) could be seen as a methodological artefact deriving from the fact that studies supporting FDTM used mainly oral accounts which may cause more anxiety to the individual than written accounts and as a result more fragmented and disorganized narratives will be produced. The authors support their claim by presenting their own findings from written accounts of trauma which show that the length of the trauma narratives exceeded those of other memories in both the PTSD and non-PTSD group, which is in opposition to the FDTM predictions.

What the aforementioned along with other researchers have proposed as an alternative approach to traumatic memories is the so-called “landmark view” (e.g. Berntsen et al, 2003) or else the “equivalency/superiority view” (e.g. Porter & Birt 2001) of trauma memories. As Berntsen et al (2003) argued, echoing other writers (e.g. Rubin & Kozin, 1984; Shum, 1998) “traumatic memories are likely to form multiple links to other memories in the autobiographical knowledge base and thereby become reference points for the attribution of autobiographical meaning to less distinctive experiences and for generating expectations” (p. 679). What distinguishes trauma therefore is the increased number of negative implications that it is having on the rest of the individual’s conceptual structure as well as the generally increased negative anticipations that it creates. The last point should be particularly emphasized since, as will become evident later on, the concepts of implication and anticipation will be central

in the explanatory model proposed in the present study. The equivalency/superiority view expresses the same idea by proposing that traumatic memories are not only equivalent but even superior to positive emotional memories since, according to Porter & Birt (2001), traumatic memories are “associated with a richness of detail and more emotional information compared to positive emotional memories” (p. 111).

Several other studies supporting the above argument have also found that trauma does not invariably lead to phenomena such as dissociative amnesia and intrusions with their supposed, very pronounced sensory component (Geraerts et al, 2007). These studies have also found evidence which suggests that conscious avoidance, and thus thought suppression, of traumatic memories is far more prevalent compared to repression. (Melchert & Parker, 1997; Porter & Birt, 2001)

It must be mentioned that the landmark view of traumatic memories does not propose that the mechanism responsible for the storage and retrieval of the traumatic memories is in any way different to that used for negative non-traumatic or even positive memories. The only difference is that while the same mechanism “may be functional in the case of important, non-traumatic memories- such as peak events- it is likely to be dysfunctional in the case of a trauma...[since] a highly deteriorating event would bias the interpretation and attribution of meaning to other, non-traumatic, events. Such “overshadowing” due to dysfunctional reference points may help to explain much of the anxiety and depression suffered by victims of a trauma” (Bertsen, 2001, p. 155).

Taking all the above into account the obvious question to ask is why or how for certain individuals their traumatic experiences become such a central component of their life narratives to the extent that they overshadow or over-determine the entirety of their conceptual structure. Personal construct theory provides a range of conceptual tools that would help understand the type of construing surrounding traumatic experiences.

Kelly (1955) based his personal construct theory on the concept of anticipation, aptly expressed in his fundamental postulate: “a person’s processes are psychologically channelized by the ways in which he anticipates events” (Vol. 1, p. 46). Anticipation is thus central to our understanding of the world as well as our understanding and elaboration of our self-concept. As the aforementioned research has shown “a traumatic experience, almost by definition, violates a person’s expectations” (Bermtsen et al, 2003, p. 675) often leading to what, in personal construct terms, has been described as invalidation.

Very often a traumatic event contradicts/invalidates our sense-making or very often that comes as a result of the way others react towards us after the event has taken place. This initial invalidation is bound to create “Kellian anxiety” in the individual since the trauma event is perceived as lying “mostly outside the range of convenience of the [person’s] construct system” (Kelly, 1955/1991, Vol. 2. p. 7). The present thesis postulates that if the person cannot overcome the invalidating effects of trauma and the accompanying anxiety shortly after the occurrence of the event then a sense of current threat will develop, i.e. the awareness of an imminent comprehensive change in the [person’s] core structures” (Ibid). In that sense, the current model suggests a reversal of the threat - anxiety sequence described in Sewell et al’s model (see Figure 2.1) in that anxiety is thought to occur first, since it concerns the person’s inability to comprehensibly grasp the meaning of the event (the external link), and only when this inability continues for an extended period of time then the sense of threat develops since the person feels that their core structures are under attack and need revising (the internal/intra-subjective link). This notion is in accordance with the DSM specifications according to which a period of at least one month post-event is needed in order for a formal PTSD diagnosis to be made.

Furthermore, the current model proposes that at the time the individual has started experiencing threat that means that the trauma has already been placed at the top of the individual’s conceptual structure, in other words trauma has become superordinate. According to Kelly’s organization corollary “each person characteristically evolves for his convenience in anticipating events, a construction system embracing ordinal relationships between constructs (Ibid, p. 5). If trauma, with its negative valence, becomes superordinate (see Fig. 2.11), as data from the present study showed, the person will subsequently start deriving his/her anticipations and predictions from a system of ordinal relations that will invariably lead to negative expectations since trauma will “bias the interpretation and attribution of meaning to other, non-traumatic, events” (Bertsen, 2001, p. 155).

This super-ordinancy/over-elaboration of the traumatic event can be explained on the basis of the choice corollary of personal construct theory which states that a person will use his/her constructs in such a way as to “anticipate the greater possibility for the elaboration of his system” (Bannister & Fransella, 1971, p.25). Following more specifically Hinkle’s (1965) construal of the choice corollary here we can predict that “a person will resist movement in the direction of reduced implication (threat) or relative

absence of implications (anxiety)” (Bannister & Mair, 1968, p.81). In that sense, a person who experiences trauma and later develops PTSD is in all probability the one who, as a defence against an overwhelming sense of anxiety and threat, chooses (not necessarily deliberately or consciously) those aspects of his/her construct system which will give him/her a better vantage point from which to anticipate future events.

It should be emphasized here that the person does not always choose between logical alternatives but rather between alternatives that their conceptual system allows them to see as open. In that respect, a person might end up choosing between two equally unattractive alternatives (e.g. either, I am to blame or the world is evil). The person may thus decide to choose one of them (e.g. I am to blame) in order to start elaborating his/her system so as to gain maximum elaboration and thus maximum anticipation, avoiding in this way threat (reduced implications/anticipations) and anxiety (absence of implications/anticipations). By doing so the person gets engulfed in a construal process, which although it has as its main purpose to defend him/herself against anxiety and threat nevertheless puts into motion a procedure whereby the trauma and its implications (e.g. I am to blame) get over-elaborated and thus superordinate in his/her conceptual structure.

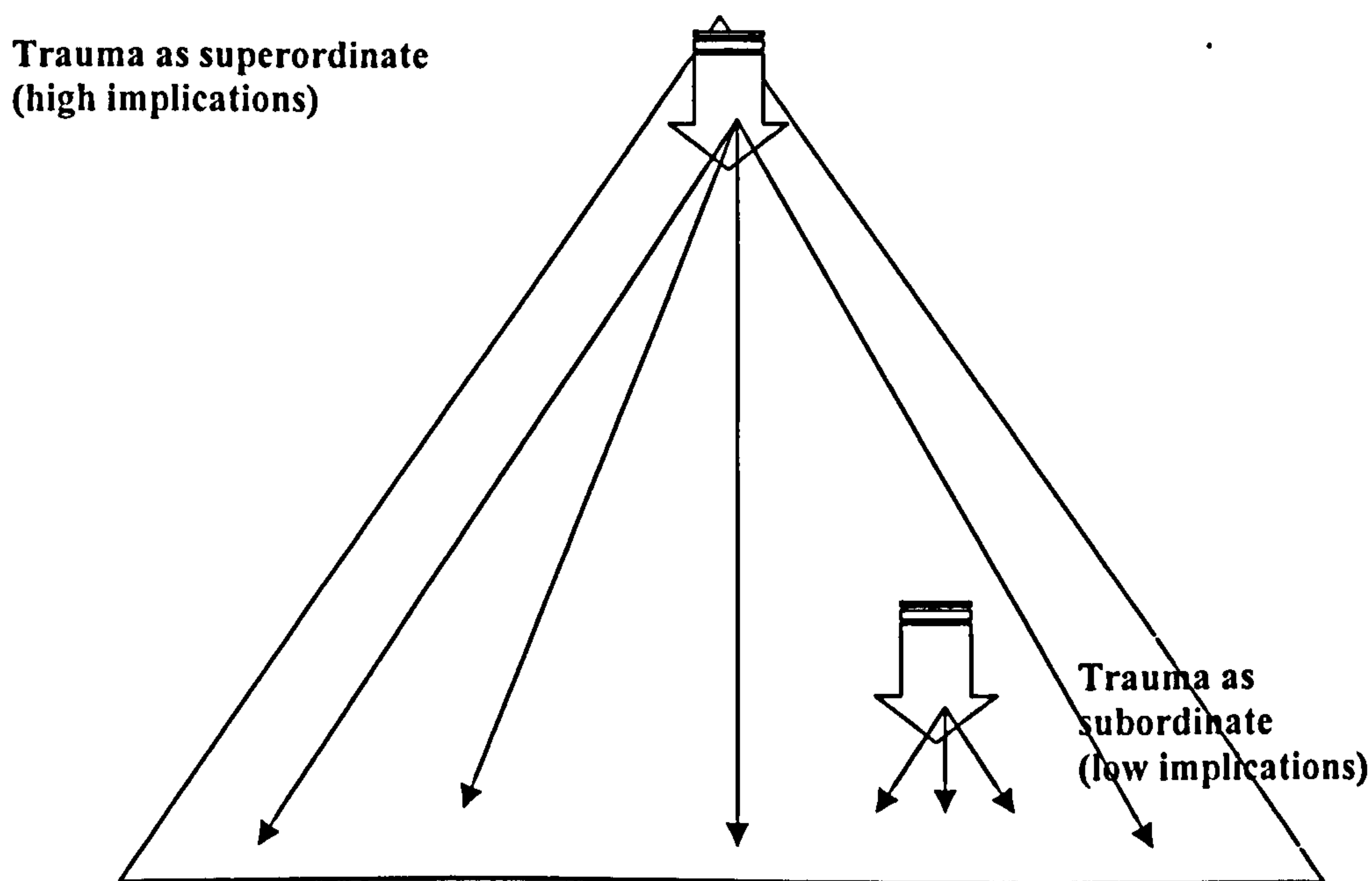


Fig. 2.11: A graphic representation of trauma's position within a hierarchical conceptual structure.

As a result, this process leads to a certain construction of reality in which trauma functions as lenses through which everything else is seen and interpreted. The above mechanism explains what we could call the “trauma paradox”. In other words, the person gets to elaborate certain aspects of his/her conceptualization of the traumatic experience in order to increase prediction/anticipation and avoid negative psychological consequences (such as fear, anxiety, sense of threat etc), but, in doing so he/she places trauma in the centre of his/her existence and as a result negative affect increases instead of decreasing.

From this perspective the choice corollary along with the concept of dilemma should be seen as central not only in trauma conceptualizations but also in any other aspect of psychological functioning. It is hypothesized then that early intervention should be useful in assisting the individual make certain choices in their elaboration of their traumatic experiences so that negative aspects of self, others, and the world in general do not get elaborated to such an extent as to become superordinate within their conceptual structure or else the main reference points in their life narratives.

Apart from theory-based elaborations, which characterized the previous personal construct model (Sewell et al, 1996), the present study wants to also incorporate some data-based considerations within its structure. One of the main findings in the correlation analysis conducted (see Table 2.4) was the significant strong correlations found between negative valence and some of the questionnaire measures. Relevant literature on the issue suggests that “ extreme negative valence, as in trauma, seems to increase the time for which the memory is accessible for involuntary retrieval relative to memories of extremely positive events” (Berntsen, 2001, p. 154). This finding is in accordance with, on the one hand, the strong positive correlations found between negative construct valence and measures of re-experiencing, intrusion and anxiety, and, on the other hand, the strong negative correlations between the mixed valence constructs and the same measures. Negatively valenced emergent poles also correlated with depression scores (BDI), although not as strongly.

The measure of variance accounted by the first principal component had a significant (positive) correlation with the PTSD avoidance subscale. The measure appeared to have these relations only in women when the two sexes were tested separately (Table 2.6). Overall, in mixed gender, the measure correlated (positively) with the IES intrusion subscale. These findings support the conceptualization that as an

individual tightens up and restricts his/her conceptual and perceptual fields in order to avoid inconsistencies and contradicting evidence, in other words employs avoidance tactics as a defence, intrusiveness increases and psychological functioning deteriorates.

Finally, measures of conceptual elaboration complete the picture and provide further insights. The variability of intensity measure showed negative correlations mainly with the arousal aspect of PTSD and also with depression. The conflict measure appeared to have some gender specific effects, showing significant negative correlations with PTSD measures only in women (Table 2.6). Seen overall, in mixed gender, conflict showed negative correlations with re-experience and avoidance symptoms, which suggests that more conflict/elaboration/complexity leads to healthier psychological functioning. While it could be expected to find reduced levels of conflict within the trauma element the present findings suggest otherwise. The trauma element appeared to contain significantly more conflict, thus being more elaborated, than the rest of the elements. This finding supports the present thesis that PTSD is the result of an over- rather than under-elaborated traumatic experience, and throws more doubt on Sewell et al's model. As the results from the pre- and post-therapy comparisons regarding the measure of conflict also suggest, elaboration cannot be seen as an absolute measure but rather two things have to be taken into account each time we consider it: i) what is the thing that gets elaborated and ii) how does it get elaborated. As explained earlier, within the presently proposed model trauma is the result of a negative experience, which within the context of the specific construal choices that a person engages in gets over-elaborated, assuming in this way a superordinate/important role in the person's life narrative. Being superordinate, trauma starts having negative implications for the rest of the conceptual structure (Figure 2.11) since each individual element of the structure gets elaborated in accordance with the trauma's negative implications.

It should be added here that the measure of trauma extremity points to the same direction as the measure of conflict/elaboration. More extreme ratings, as trauma was found to contain, have been linked to meaningfulness as well as pathology (O'Donovan, 1965). This finding further supports the present model since trauma appears to be heavily invested in meaning, and, due to the negative valence of its meaning psychological maladjustment is very probable to occur. In that respect the old problem of conceptualizing extremity as denoting either meaningfulness or pathology could be seen as a pseudo-dilemma since both could occur at the same time. Bonarius (1970),

who has extensively studied the area of extreme rating, concluded that “psychology may benefit from a re-definition of these concepts as qualities of relations rather than of people or of objects (p. 102). The above conceptualizations are diagrammatically presented in Fig. 2.12.

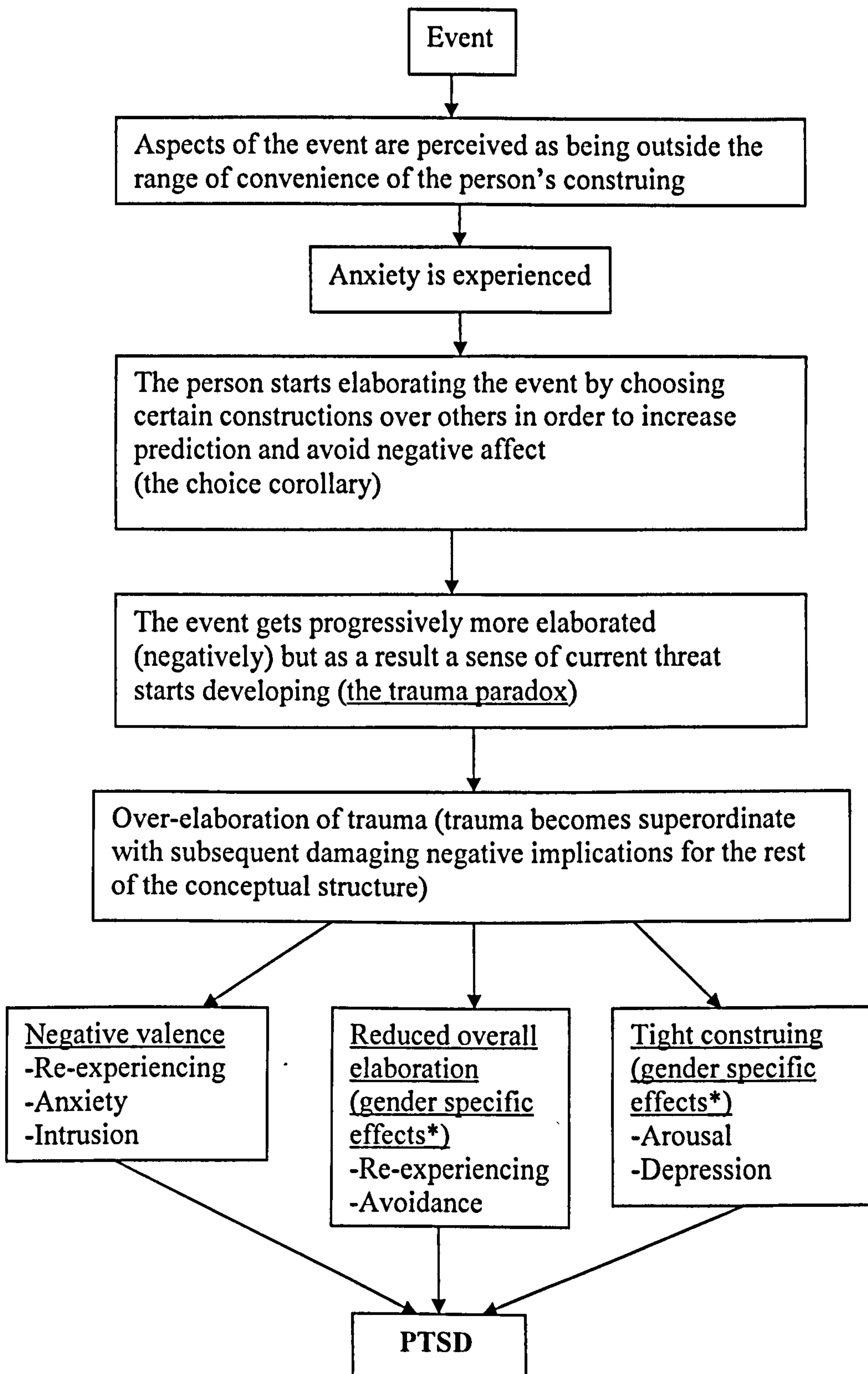


Fig. 2.12: Diagrammatic representation of PTSD development based on a personal construct theory conceptualization and data from the present study.

Chapter Three: HICLAS Study

3.1 Hierarchical-classes analysis (HICLAS) and Post-traumatic stress disorder (PTSD) revisited: A critical review and a proposal of new ways of analysis.

Central to the personal construct theory model of PTSD is the hypothesis that the traumatic event will be less elaborated, or less integrated, compared with other aspects of the construct system of a person diagnosed with the disorder (Sewell et al, 1996). Sewell and his colleagues operationalised the degree of elaboration of the traumatic event using the Hierarchical-classes analysis software programme (HICLAS: De Boeck, 1986), which provides an asymmetric (hierarchical) analysis of repertory grid data. Based on set theory (De Boeck & Rosenberg, 1988), the HICLAS algorithm analyses grid data by identifying overlapping as well as separate patterns within the grid's elements and constructs and provides a final hierarchical solution based on subsumed (subordinate) and subsuming (superordinate) classes or clusters of elements and constructs. The HICLAS software depicts its hierarchical solution with a graphic representation in which the grid's element and construct classes are represented within two pyramidal shapes adjacent at their bases (see Figure 3.1).

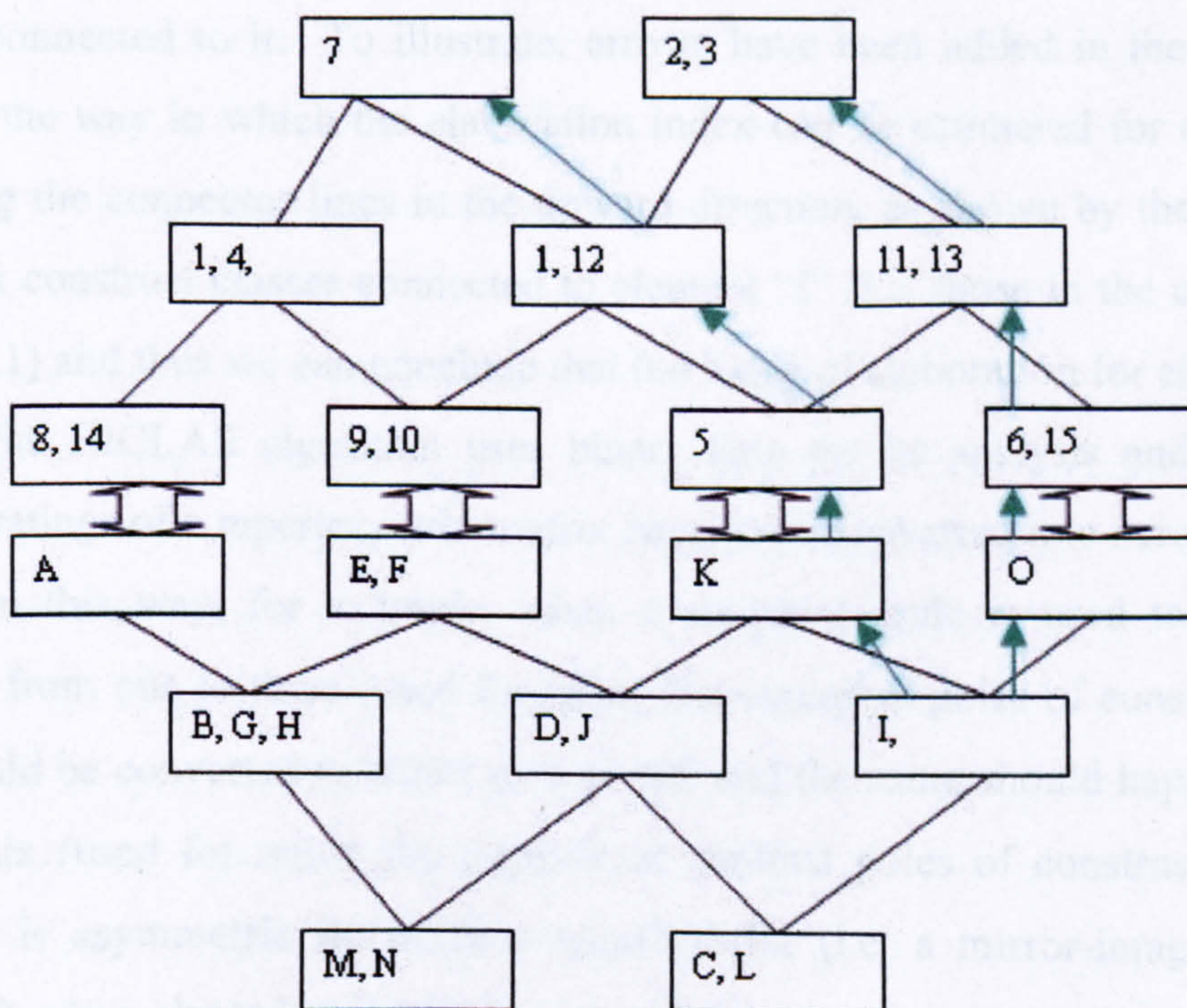


Fig. 3.1: An example of a HICLAS graphic representation of its solution. Letters represent elements and numbers represent constructs.

The number of classes appearing at the base of its pyramidal shape is determined by a “rank” which has to be selected by the user. The rank could be seen as analogous to factors chosen to be included in a factor analysis and it sets the number of bottom (subordinate) level classes to be allowed in the analysis. In the example depicted in Figure 3.1 rank four was chosen. Rank four was also used in all HICLAS analyses performed in this thesis. The choice of rank four was based on the fact that it was the rank that, overall, yielded the most “sensible” structure while, at the same time, also capturing a good amount of the overall variance (see the Results section in Chapter Two for more details). In other words, at rank four the following two things seemed to occur: a) the goodness of fit index appeared to have peaked, with perhaps only minor increases at higher rank level; b) the hierarchies appeared to be “sensible” in that they had few empty classes and un-classed object/attributes (i.e. they were interpretable).

In the HICLAS structure depicted in Fig. 3.1 the boxes represent element and construct classes (e.g. elements M and N constitute together an element class whereas constructs 9 and 10 form a construct class). The lines indicate the connections between element and construct classes. Based on the notion of “connectivity”, previously described by other authors (e.g. Robey et al, 1989), Sewell et al (1996) used a method of calculating the elaboration index of a given element by counting all the construct classes connected to it. To illustrate, arrows have been added in the above figure to indicate the way in which the elaboration index can be estimated for element “I”. By following the connector lines in the upward direction, as shown by the arrows, we can count six construct classes connected to element “I” (i.e. those in the upper pyramid in Figure 3.1) and thus we can conclude that the index of elaboration for element “I” is six.

The HICLAS algorithm uses binary data for its analysis and as a result the original ratings of a repertory grid matrix have to be converted into zeros (“0”) and ones (“1”). In this way, for example, when a six-point scale is used to rate a grid the numbers from one to three (used for rating the emergent poles of constructs, see Table 3.1) should be converted to either zero or one and the same should happen for numbers four to six (used for rating the implicit or contrast poles of constructs). Given that HICLAS is asymmetric its solution would differ (i.e. a mirror-image would not be produced) when clustering the emergent versus clustering the implicit pole. Thus, the choice between clustering either the emergent or the implicit pole of constructs (i.e. deciding which to represent by “1” and which by “0”) is problematic if the decision of

using one or the other type of clustering is not supported by a theoretically based rationale.

In Sewell et al's (1996) original study, conducted with Vietnam veterans, the emergent poles were designated as "0" and the implicit poles as "1" without the provision of a rationale for opting for the particular type of clustering, thus rendering the choice of the method arbitrary. Furthermore, the Vietnam study does not state if the choice of clustering the implicit pole was made before or after the analysis took place, in this way, even more doubts on its methodology. When Sewell et al's results failed to replicate in a study with sexual assault victims (Moes & Sewell, 1994), Moes (1997) sought to explore the issue of whether or not the two types of clustering might be responsible for accounting for the observed discrepancies.

Moes (1997) reanalysed the data of the original study (Sewell et al, 1996) as well as the data from two additional studies (Moes and Sewell 1994; Sewell 1996) using alternatively both types of clustering. Moes' study produced mixed results that in some cases were in direct opposition to Sewell et al's original hypothesis, namely that the direction of the difference in the elaboration index between the PTSD and the non-PTSD groups appeared to favour the latter group. Thus, when clustering the emergent pole (1-0 configuration) two of the studies (Sewell 1996; Sewell et al, 1996) showed that the PTSD participants elaborated more (instead of less) on the traumatic event, although the results did not reach significance. As Moes (1997) concludes, the "reasons for this discrepancy are not entirely clear at this point" (p. 59).

3.2. To cluster or not to cluster?

Seen globally, the question of whether or not to use either type of clustering (the "0-1" or the "1-0" type, clustering respectively the implicit or the emergent poles of a construct system) should be dismissed on epistemological grounds as long as an explanation of what it means to cluster either pole is not provided. Epistemologically speaking, a tentative theoretical model cannot be either supported or dismissed by an equally tentative and unfounded method of analysis. In the case of the personal construct theory model of PTSD, which is based on the working hypothesis that the traumatic event experienced by PTSD patients will show less elaboration when compared to an asymptomatic group of people, its hypothetical structure cannot be erected on the equally hypothetical and yet untested grounds of the two clustering

methods. This chapter aims to explicate the meaning behind the two types of clustering and propose a new method which will be based on theoretically as well as empirically sound evidence.

The main concern when analysing repertory grids using any kind of analysis must be that relationships expressed within the original grid are not being distorted by the method of analysis being used. When a person rates a particular element within a grid the element is assigned to one or the other pole of a construct. While this function should be preserved during analysis, the HICLAS clustering configurations do not allow for this to take place, thus introducing a distortion in element-construct relations. Choosing to cluster the emergent or the implicit poles one at a time (using either the “1-0” or “0-1” configurations) simply means that independently of the participant’s choice of construct pole, when rating a certain element, the type of clustering we are using for the analysis forces the data in a certain direction not otherwise expressed by the rater.

Table 3.1 illustrates the argument by depicting the rating of a single element, which represents a traumatic event, reported by Carol (a pseudonym of a PTSD patient) during her pre-therapy assessment conducted by the author. As we can see each time the element is assigned to either pole of a construct, creating fifteen connections with construct poles, the same number as available constructs. If however we decided to cluster either pole of the constructs in HICLAS then the analysis would take into consideration only those construct poles that our clustering would allow (either the emergent or the implicit poles).

To illustrate the above, in case we decided to cluster the emergent poles then poles B1, C1, D1, F1, J1, K1, L1, and M1 would be taken into account during the HICLAS analysis, and, in case we decided to cluster the implicit poles then only poles A2, E2, G2, H2, I2, N2, and O2 would be part of the analysis. Put differently, each time we use one or the other type of clustering in HICLAS analysis we lose a considerable part of our data.

Table 3.1: Carol's traumatic element rating.

1 Emergent pole	2	3	Rating of trauma element (#12)	4	5	6 Implicit pole
A1			5	—————→		A2
B1	←————		1			B2
C1	←————		1			C2
D1	←————		1			D2
E1			6	—————→		E2
F1	←————		1			F2
G1			6	—————→		G2
H1			6	—————→		H2
I1			4	—————→		I2
J1	←————		1			J2
K1	←————		1			K2
L1	←————		3			L2
M1	←————		1			M2
N1			6	—————→		N2
O1			6	—————→		O2

A further illustration of the above argument can be seen in Figure 3.2, where the traumatic event (#12) appears within the context of the rest of the elements and constructs. The figure represents Carol's HICLAS graph analysis when clustering the implicit pole ("0-1"). As in Table 3.1, the traumatic element seems to connect with seven instead of the expected fifteen construct poles.

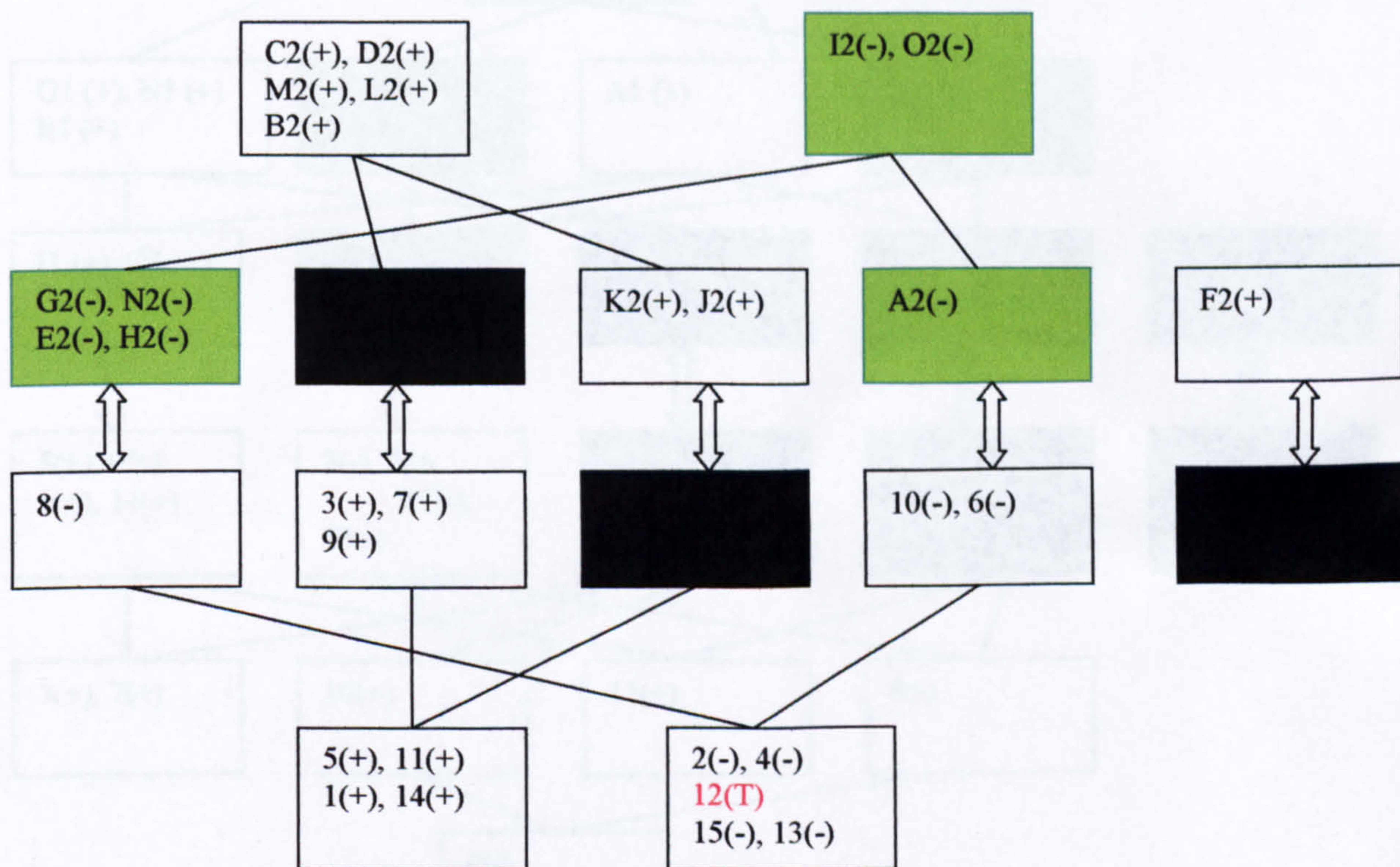


Fig. 3.2: HICLAS graphic representation of Carol's repertory grid analysis when clustering the implicit pole ("0-1"). Black boxes represent empty classes. The red coloured element (#12) is the traumatic event. Green boxes represent the construct classes connected to the traumatic event.

Carol's HICLAS graphic representation when clustering the emergent pole (1-0) can be seen in Figure 3.3. In this case only eight construct poles, out of the expected fifteen, seem to connect to the traumatic event (#12).

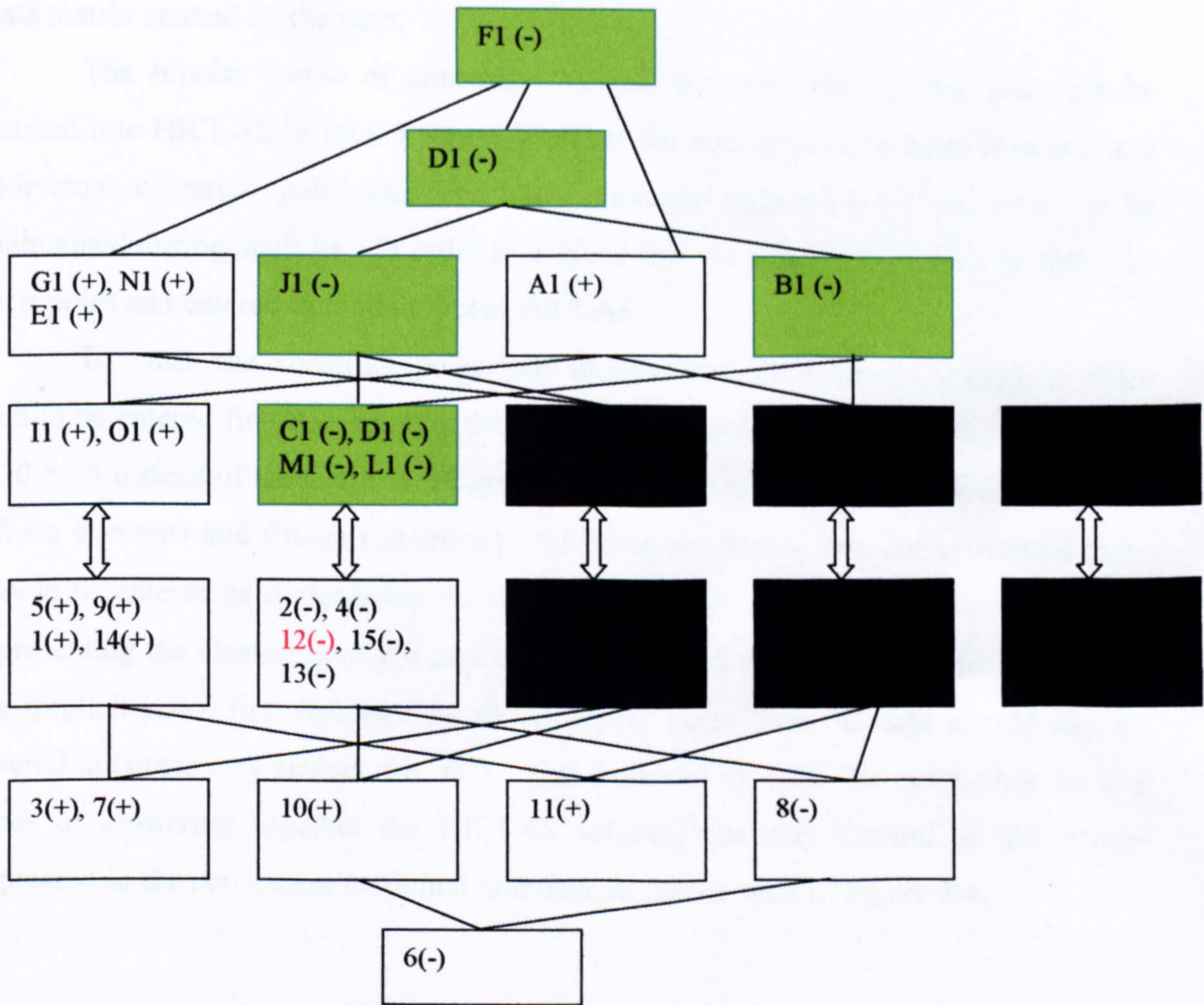


Fig. 3.3: HICLAS graphic representation of Carol’s repertory grid analysis when clustering the emergent pole (“1-0”). Black boxes represent empty classes. The red coloured element (#12) is the traumatic event. Green boxes represent the construct classes connected to the traumatic event.

3.3. A new method of clustering: Combining together the emergent and implicit types of clustering.

The problem created by clustering either pole of the constructs is mainly due to the way the repertory grid data are entered into HICLAS. In all previous studies so far

constructs used to be entered as single units into the programme. That means that when a grid consisting of fifteen elements and fifteen constructs, for instance, was entered into HICLAS the resulting matrix consisted of fifteen rows (representing the constructs) and fifteen columns (representing the elements). Considering that HICLAS allows only for binary data to be entered, that also meant that individual elements could only be assigned to one or the other pole of constructs resulting in a distortion of the original data matrix created by the rater.

The bipolar nature of constructs should, however, dictate that grid data be entered into HICLAS in such a way as to allow for connections between elements and individual construct poles (not constructs), already expressed by the rater, to be maintained during analysis. In order to achieve this the constructs should be split into their poles and entered individually into HICLAS.

To enter the construct poles individually into HICLAS the emergent poles should be entered first immediately followed by the implicit poles, creating in this way a 30×15 instead of the old 15×15 matrix (in the case of a repertory grid consisting of fifteen elements and fifteen constructs). As far as the binary data are concerned these should be entered as if clustering the emergent pole first (i.e. as 1-0) followed by data representing the clustering of the implicit pole (i.e. as 0-1). In case we decide to enter the implicit poles first followed by the emergent poles then the data should also be entered the other way around (i.e. as 0-1 first followed by 1-0). By combining the two types of clustering together the HICLAS solution can stay faithful to the ratings expressed in the participant's original grid data, as can be seen in Figure 3.4.

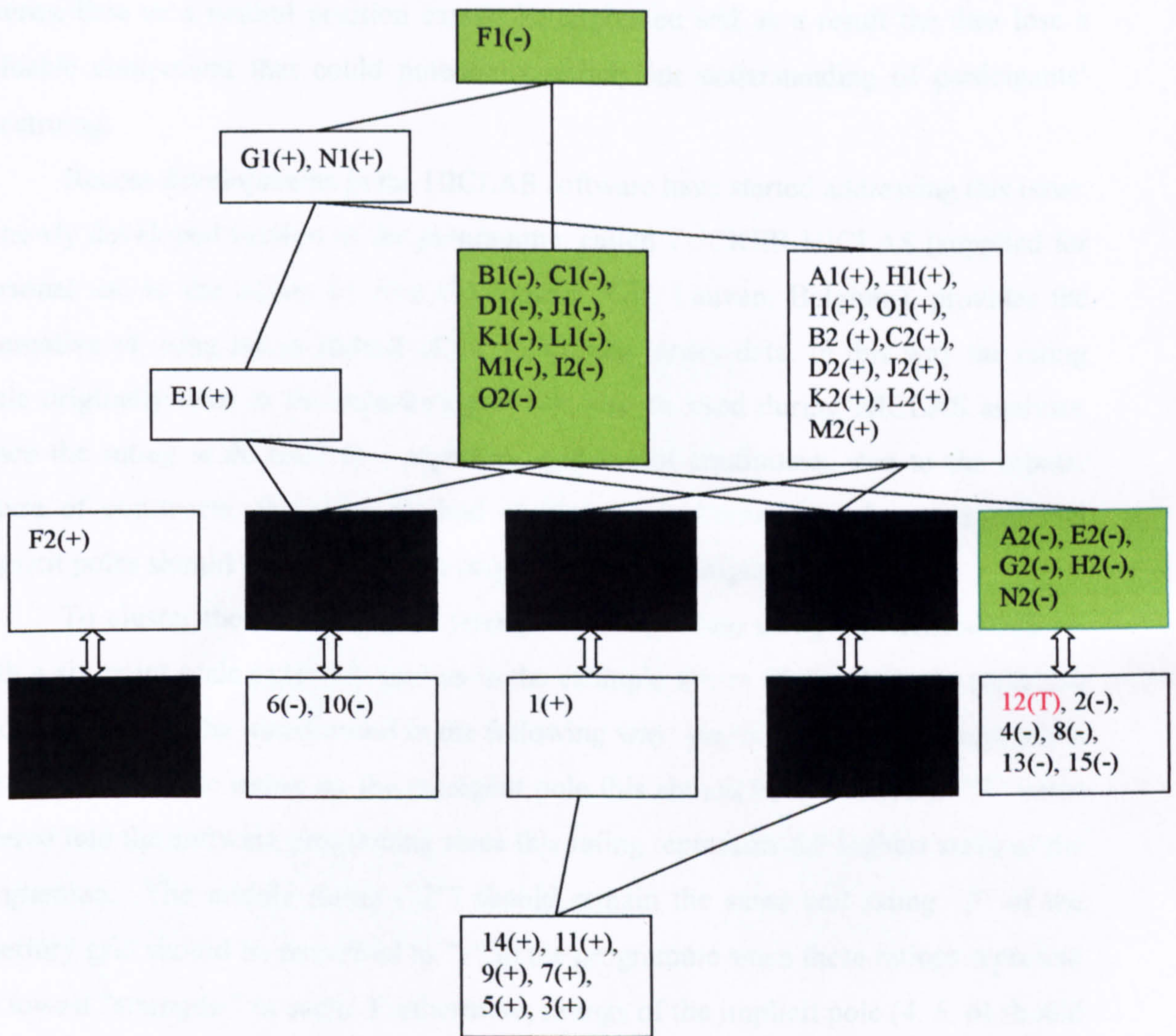


Fig. 3.4: HICLAS graphic representation of Carol's repertory grid analysis when combining the two types of clustering together ("1-0" and "0-1"). Black boxes represent empty classes. The red coloured element (#12) is the traumatic event. Green boxes represent the construct classes connected to the traumatic event.

3.4. Bipolar or scalar? Binary or rating? Going beyond dichotomies: Some further exploration into HICLAS analysis.

Kelly's notion of the nature of constructs was that "they could be used in a scalar mode, while still being bipolar in origin" (Bannister & Fransella, 1971, p.25). Analysing rated repertory grids through the HICLAS software means that the ratings originally selected by the participant have to be transformed into binary data in order for the HICLAS analysis to take place. This is a process of reducing the grid data into something that is potentially much less meaningful and certainly more distant from the meaning participants themselves attach to their grids. Binary data mean that an

intermediate or a neutral position cannot be expressed and as a result the data lose a valuable component that could potentially enrich our understanding of participants' construing.

Recent developments in the HICLAS software have started addressing this issue. A newly developed version of the programme, called TUCKER-HICLAS (supplied for personal use to the author by Eva Ceulemans, K.U. Leuven, Belgium), provides the alternative of using rating instead of the traditional binary data. In this way the rating scale originally used in the repertory grid can also be used during HICLAS analysis. Since the rating scale used in a repertory grid is not continuous, due to the bipolar nature of constructs, the same method of clustering alternatively the emergent and implicit poles should be used as in the original HICLAS programme.

To cluster the emergent pole (ratings 1, 2, 3), when using TUCKER-HICLAS with a six-point scale repertory grid as in the example above (Table 3.1), the repertory grid's data should be transformed in the following way: given that rating "1" represents the highest possible rating on the emergent pole this should be converted to "3" when entered into the software programme since this rating represents the highest score of the programme. The middle rating ("2") should remain the same and rating "3" of the repertory grid should be converted to "1" in the programme since these ratings represent the lowest "strengths" in each. Furthermore, ratings of the implicit pole (4, 5, 6) should all converted into zeros ("0").

The same rationale should be followed when clustering the implicit pole (this time rating "4" of the repertory grid should be converted to "1" in the programme and "6" to "3" respectively). By following the aforementioned procedure two 15×15 matrices are created (from an initial repertory grid containing 15 elements and 15 constructs) that contain data ranging from zero ("0") to three ("3"). The two matrices should be entered into TUCKER-HICLAS in the same way as in HICLAS described earlier.

The extra information we derive from the TUCKER-HICLAS analysis is an estimation of the "strength of association" between the element and construct classes. A numeric representation of the strength of association is shown in Figure 3.5 by the numbers attached to the double arrows separating the element from the construct classes. The strength is calculated by taking into account only the maximum score that an element class relates to. Thus, for example, although the element class which elements "1" and "5" belong to relates to strengths 2 and 3, only strength 3 should be

taken into account since this is the maximum score of association connected to the specific element class.

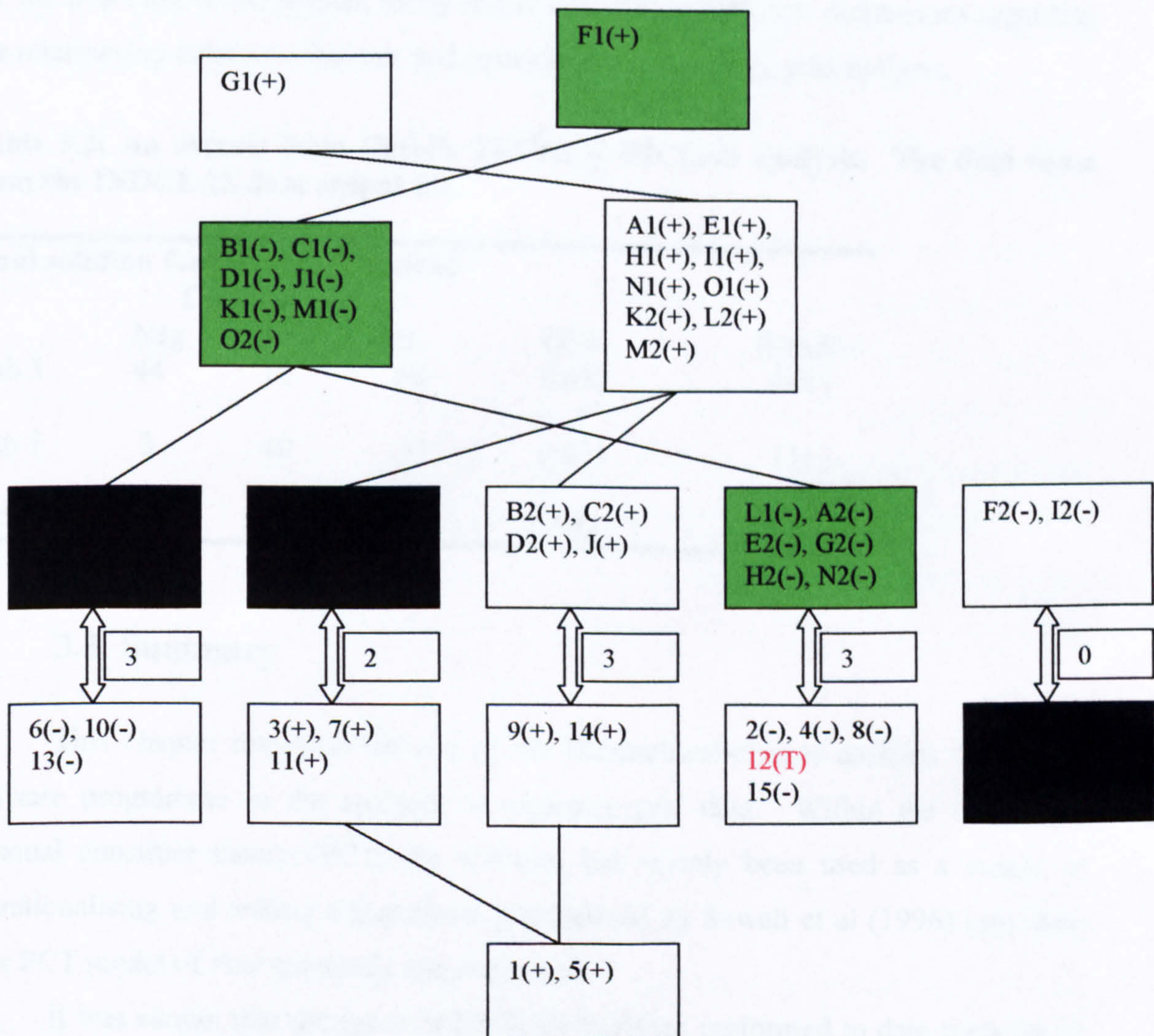


Fig. 3.5: TUCKER-HICLAS graphic representation of Carol's repertory grid analysis (combining emergent and implicit pole clustering). Black boxes represent empty classes. The red coloured element (#12) is the traumatic event. Green boxes represent the construct classes connected to the traumatic event. Numbers in the boxes attached to the double arrows represent the strength of association between element and construct classes.

The way the strength of association is being estimated can be seen in Table 3.2. Of particular interest here is the bundle matrix in which the four columns represent the

individual bundles (see Appendix D for a more detailed explanation of the terms used). By counting vertically the number of ones appearing in each bundle we can calculate the strength of association for each one. Thus, starting from bundle number one, on the far left, we can count three ones (strength = 3), the second bundle right next to it contains one zero and two ones (strength = 2), and the remaining two bundles both contain three ones (strength =3). The “strength of association” measure is being used for the first time in the present thesis and is expected to add new dimensions regarding the relationship between elements and constructs in a repertory grid analysis.

Table 3.2: An extract from Carol’s TUCKER-HICLAS analysis. The data come from the INDCLAS data output file.

Final solution for the matrix entities					
	Discrepancies				
	Neg	pos	tot	GFit	Bundles
Slab 3	44	18	62	0.637	1011
Slab 1	3	40	43	0.811	1111
Slab2	30	14	44	0.782	1111

3.5. Summary

This chapter reviewed the use of the Hierarchical-classes analysis (HICLAS) software programme in the analysis of repertory grid data. Within the context of personal construct theory (PCT) the software has mainly been used as a means of operationalising and testing a hypothesis put forward by Sewell et al (1996) regarding their PCT model of Post-traumatic stress disorder.

It was shown that the types of HICLAS analyses performed to date were based on the implicit assumption that either pole of the constructs should be clustered in order for the analysis to take place. The shortcomings of such an assumption were made explicit and a new method of combining both types of clustering (emergent and implicit poles at the same time) was presented.

This chapter also explored the possibility of analysing repertory grid data by using rating instead of binary data. A new type of Hierarchical-classes analysis was presented via the TUCKER-HICLAS programme and its advantages were discussed.

Chapter Four: Student Study

4.1 Introduction

Post-traumatic stress disorder (PTSD) has been shown to relate to specific features of construing (Harter, Erbes, & Hart, 2004; Harter & Neimeyer, 1994; Sewell et al, 1996) and research evidence is accumulating on the possible links between PTSD and certain personality traits, such as dissociation, thought suppression and repression, that might function as possible antecedents or maintaining and perpetuating factors of the disorder (Engelhard et al, 2003; Gershuny, Cloitre & Otto, 2003; Gil, 2005; Holtgraves & Stockdale, 1997; Mayou, Ehlers & Bryant, 2002; Shipherd & Beck, 1999; Spinhoven & van der Does, 1999). Increasingly, within the PTSD literature, emphasis is shifting towards a more constructivist approach which takes into account the person's response to trauma in line with the understanding that trauma alone cannot fully account for the symptomatology of the disorder. In this context, pre-traumatic personality is now regarded as a major predictor for the development of PTSD as well as an important risk factor (Gil, 2005; Kanninen, Punamaki, & Qouta, 2002; McFarlane, 2000b; Miller, 2003). There is also evidence that personality dimensions are relatively stable characteristics that remain unchanged even after a traumatic exposure and the subsequent development of PTSD (Gil, 2005).

4.1.1. Dissociation

Dissociation, in particular, has long been implicated in trauma research and lately its peritraumatic occurrence as a predictor factor of PTSD has been studied extensively (e.g. Bremner et al, 1992; Ehlers, Mayou, & Bryant, 1998; Griffin, Resick, & Mechanic, 1997; Marmar et al, 1994). Within the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV: American Psychiatric Association, 1994) dissociation is listed as a defence mechanism, which people employ in order to deal with emotional conflict or internal and external stressors, and is defined as "a breakdown in the usually integrated functions of consciousness, memory, perception of self or the environment" (APA, 1994, p.755). Dissociation is moreover regarded as an automatic process rather than a conscious mechanism and is generally seen as a pathogenic, or else neurotic and

immature, rather than an adaptive defence. Many authors have conceptualized dissociation as a means of psychological escape that takes place when physical escape is not possible (Gershuny & Thayer, 1999). However, dissociation is not necessarily linked to psychopathology and has historically been seen as forming a continuum with extreme forms of it found in one end of the continuum, as in dissociative identity disorder (DID), and more common forms of it lying at the “non-pathological” end of the continuum (Bernstein & Putnam, 1986).

It has been hypothesized that the way dissociation works in the case of PTSD is through a process in which the trauma is laid down within autobiographical memory in such a manner that leads to involuntary re-experiencing of aspects of the traumatic event (Brewin, Dalgleish, & Joseph, 1996; Ehlers & Clark, 2000; Foa & Hearst-Ikeda, 1996; van der Kolk & Fisler, 1995). The idea behind this is in line with cognitive models of PTSD (e.g. Ehlers & Clark, 2000; Foa & Rigs, 1993) which underline the significance of elaboration of fragmented trauma memories into coherence. The same idea also governs the personal construct model of PTSD (Sewell et al, 1996), which can additionally provide an answer to the question of how it can be assessed when integration of the trauma memory has occurred, through the repertory grid technique.

In the present study the Dissociative Experiences Scale (DES: Bernstein & Putnam, 1986) was used in order to assess general dissociative states which “bear a close phenomenological resemblance to peri-traumatic dissociation” and are also thought to relate to PTSD by enhancing “spontaneous dissociation during trauma” (Engelhard et al, 2003, p.68). The DES was designed as a trait measure and, especially with non-clinical samples, is thought to assess a rather independent and distinct personality dimension. People with PTSD and other dissociative disorders have consistently produced high scores on the scale. Holtgraves and Stockdale (1997) reported that people who score high on the scale could easily imagine “experiencing negative emotions and at the same time were less able to recall the words used to prompt these imaginings”, with a possible explanation for this being that “dissociators tend to focus narrowly and deeply on the imagined experiences but this prevents them from elaborating on the imagined experiences and as a result they form very isolated experiences of these experiences” (p.704). The same authors also remark that because of this failure at elaboration dissociators cannot easily integrate these negative emotions and that leads to a relatively poor ability to recall them. It is important to notice here that the failure to recall occurred only for explicit memory and “this is understandable

because the failure to elaborate at encoding should impact explicit and not implicit memory” (p.704). Dissociative defences, especially when used chronically as a way to cope with stressful events, could be maladaptive and lead to psychopathology. Links between the DES and state/trait anxiety, neuroticism and schizotypy have been reported among others (Marckelbach & Muris, 2001).

4.1.2. Thought Suppression

The role of thought suppression (Wegner & Zanakos, 1994) within the field of trauma studies and more generally within psychopathology appears to be to a certain extent controversial. Although the concept has been defined as a conscious defence mechanism generally regarded to be adaptive for the individual (American Psychiatric Association, 1994), research indicates, however, that the construct appears to be linked with immature defences and psychopathology (Muris & Merckelbach, 1997). Specifically, positive correlations have been found to exist between thought suppression and measures of depressive and anxious affect, obsessional thinking and emotional vulnerability (Muris, Merckelbach, & Horselenberg, 1996; Wegner & Zanakos, 1994).

These discrepancies could potentially be explained by considering the measurements used to assess thought suppression. By far the most commonly used measure of thought suppression today is the White Bear Suppression Inventory (WBSI: Wegner & Zanakos, 1994). According to some researchers, however, the WBSI taps mainly into “unwanted intrusive thoughts” rather than thought suppression (see the Method section below for a more detailed discussion of the scale’s properties). Interestingly, factor analytic studies have provided support for the above claim by finding that not only the “thought suppression” factor was the weakest compared to the “unwanted intrusive thoughts” one, but also that the former correlated very weakly with measures of psychopathology. Furthermore, it was found that the WBSI as a whole correlated negatively with avoidant coping and did not correlate at all with measures of self-disclosure, which both seem counterintuitive (Hoping & de Jong-Meyer, 2003). A two factor solution of the WBSI seems to be supported by the data of the present study although a three factor solution has also been identified (Blumberg, 2000) with “self-distraction” as a third factor. As Hoping & de Jong-Meyers (2003) remark, though, “the

diagnostic value of differentiating self-distraction from thought suppression is questionable from a theoretical point of view, since distracting oneself from unwanted thoughts is a key strategy that is inherent in thought suppression”(p.1050).

Taking into account that intrusive thinking can be found within a wide range of psychological disorders (see for a review Purdon, 1999), and most importantly within those ones comorbid to PTSD, it comes as no surprise that people with PTSD have been found to score high on the WBSI. Also, a chicken and egg type of problem might exist since intrusive thinking could produce avoidance or suppression rather than the other way round (Foa, Rigs, & Gershuny, 1995).

4.1.3. Repression

The concept of repression has been variously defined since its first introduction by S. Freud (1919/1955), who thought of it as an automatic/unconscious mechanism whereby people expel thoughts or emotions that may cause conflict or anxiety from awareness. Freud regarded repression as an antecedent to the development of a wide variety of psychopathological states and later on Anna Freud claimed it as the basis for the formation of neurosis (Rassin, Mercklback, & Muris, 2000). An in-depth historical overview of the term as well as research conducted upon it can be found in Holmes (1990), who concluded that the Freudian notion of repression is problematic since “despite over sixty years of research...at the present time there is no controlled laboratory evidence supporting the concept of repression” (p.96)

More recent conceptualizations of repression have defined it as an individual difference factor (Davis & Schwartz, 1987; Weinberger, Schwartz, & Davidson, 1979). Weinberger et al (1979), who introduced the term with this latter meaning, described repressors as defined by the combination of high defensiveness, or else social desirability, and low trait anxiety that makes them have an elevated threshold for detecting anxiety-provoking cues. In this regard, repression was conceptualized as an avoidant trait-like disposition for dealing with stressful or threatening situations.

The question of how adaptive repression is as a coping strategy cannot be answered in a straightforward manner nevertheless. The reason for this is the observed discrepancy between the low anxiety levels that repressors routinely report when

confronted with stressful situations and their physiological reactions that indicate heightened arousal (Pauls & Stemmler, 2003). Some theory driven researchers, for example, have assumed that defences such as repression, which work mainly by evading or obliterating the meaning of threatening information, should be more detrimental to the individual in comparison with other defences that mainly alter the meaning of the situation, such as rationalization (Heilburn & Chefitz, 1984). Although support has been found for such a claim (e.g. Heilburn, 1982; Ilfred, 1980; Lazarus et al, 1969; Miller & Swanson, 1966), it should be noticed that these researchers used different measures and therefore definitions of repression. Research adopting the definition of repression used in the present study, however, has reported opposing findings indicating that repressors actually score high for adaptive and “healthy” ways of coping with stress, such as positive re-interpretation of the situation, and low for maladaptive coping strategies such as passivity and hostile interaction (Egloff & Hock, 1997; Furnham & Traynar, 1999; Myers & Derakshan, 2000). The results from such studies seem questionable, however, taking into account the fact that they are based on self-report measures and the tendency of people with repressive coping style to report in a socially desirable fashion.

A systems approach to repression (Schwartz, 1990) has offered a psychobiological account of its workings suggesting that repression “includes disattention to negative feedback cues that are essential for self-regulation and therefore healing” (p.409). It follows that disattention subsequently promotes a state of relative disconnection between, on the one hand, self-reports and physiology, and on the other, functional disconnection between the left and right hemispheres of the brain. According to the theory this disconnection leads to dysregulation as evidenced in increased physiological disorder, seen particularly in recovery processes, and disease as self-reports of illness have been found to be higher in people who use a categorical (yes or no) or dichotomous style of thinking (p.419). The theory does not see repression as a uniform response, however, and in that way is able to discriminate between different “levels” of repression that could potentially account for some of the contradictory findings in the literature. Thus, for example, it has been reported that repression or its more primitive form of denial can be more adaptive during the initial stages of intensive care following a heart attack but if the same defence is used at later stages of the illness would actually become dangerous and problematic for the patient. Repressing or disconnecting information can also take place within different levels of a system and

considering that higher levels represent more complex integrations of information within the system it follows that different types of 're-pression', and hence different types of defence, should vary as a function of the particular levels involved in a system.

A systemic notion of construing reality is also a defining feature of Personal Construct Theory (Kelly, 1955), which has provided some preliminary data on repressors' cognitive structure. The literature in the area is scarce and probably the only study that used both the concept of repression, as defined by Weinberger et al (1979), along with the repertory grid methodology is a study by Myers, Brewin, and Winter (1999) which concluded, among other things, that repressors are "tight construers", meaning that they "disregard new situations and view situations as similar"(p.80). As the authors remark, tight construing relates to constriction, which, according to Catina et al (1992), can function as a way whereby anxiety-provoking material can be excluded from consciousness. Tight construing has also been linked with the similar defence mechanism of denial (Slater, 1977) mentioned earlier in the systems approach.

Certain similarities do seem to exist between Schwartz's systems approach to repression and that of Personal Construct Theory and their findings could potentially throw some light on the complexities of the concept. Both theories seem to indicate that repression might not be a unique mechanism for excluding stress-provoking information from awareness and that other similar mechanisms/defences might take place depending on the levels of the person's construct system involved in the process.

4.1.4. Dissociation, Thought Suppression, Repression: Making connections and deriving hypotheses.

Certain relations between the three psychological traits/defences do seem to exist. However, within the literature reviewed here at least, the relation between Thought Suppression and Dissociation seems to have attracted most of the research attention compared to any other. A study by Van den Hout, Merckelbach, and Pool (1996) has found a substantial positive correlation between suppression and dissociation as measured respectively by the WBSI and DES ($r = 0.52$). A closer inspection of the relation by Muris and Merckelbach (1997) revealed that suppression related specifically with factors 1, "absorption-imaginative involvement" and 3, "depersonalization-derealization" as described in the factor analytic study by Ross et al (1991). A moderately positive correlation between the two constructs was also found in a

population relevant to this study, namely college students, irrespective of reported trauma (Van den Hout et al, 1996).

The nature of the association between suppression and dissociation can only be speculated upon, however, and a number of hypotheses have been proposed as possible explanations, which can be summarized as follows: i) Suppression may cause dissociation. Van den Hout et al (1996) found a relation between self-reports of trauma and dissociation but the relation seemed to disappear when suppression, as measured by the WSBI, was partialled out. This could therefore mean that dissociation is mediated by suppression and particularly, as Van den Hout et al suggest, “dissociative experiences may result from strategic/wilful efforts to forget” (p. 107). However, in a more recent critical review of the literature on the effects of thought suppression Rassin et al (2000) conclude that “as things stand, it is unlikely that thought suppression strategies may account for dissociative amnesia” (p. 991). ii) Dissociation and suppression may be expressions of another underlying factor. Several studies suggest that relatively high levels of dissociation and suppression have been found to relate to high levels of neuroticism (De Silva & Ward, 1993; Johnson, Edman, & Danko, 1995; Muris et al, 1996). Also, another possible factor determining both defences/traits could be levels of psychopathology since, as Spinhoven & Van der Does (1999) have found, the positive correlations between them completely disappeared after partialling out the influence of psychopathology level. The same authors also reported that dissociation seemed to relate weakly with levels of psychopathology since partialling out its influence “did only marginally attenuate the correlations between WBSI and level of psychopathology” (p. 882).

A number of similarities seem to exist between repressors and dissociators in regard to memory deficits, relating to certain events, and also in their capacity to avoid unwanted stimuli. However, scores on the DES were not found to associate with individual differences in repression (Holtgraves & Stockdale, 1997). The main reason behind this is that whereas dissociators score relatively high on anxiety, repressors by definition are low anxious individuals (Weinberger et al, 1979). Holtgraves and Stockdale (1997) have also reported that the DES scores of repressors were similar to those of truly low anxious people, which means that defensiveness does not play a role in that respect.

Lastly, there seems to be an absence of research about the relation between repression and thought suppression as measured in the present study. A search at the PsycINFO database using the two terms combined failed to produce any results.

As far as the relation between dissociation, suppression and repression, on the one hand, and patterns of construing measured with repertory grid methodology, on the other, is concerned there seems to be no available literature on the topic (with the exception of Myers et al, 1999). This fact necessitates the mainly exploratory nature of the present investigation.

4.2. Method

Participants

There were 114 undergraduate psychology students (84.20% female and 15.80% male with an age range between 18 and 45 years; Mean age = 21.22, SD = 5.20) from the University of Hertfordshire (England, U.K). All of them completed a 12 x 12 Life Events Repertory Grid (LERG; see measures below) along with two questionnaires (the Marlowe-Crowne Social Desirability Scale and the Trait-Anxiety Scale from the State-Trait Anxiety Inventory, see measures below). Scores derived from the two aforementioned questionnaires classified all participants into four groups: the low anxious group (consisting of low anxiety/low defensiveness scores), the repressor group (low anxiety/high defensiveness), the high anxious group (high anxiety/low defensiveness) and the defensive high anxious group (high anxiety/high defensiveness).

At a later point during the course of the study two new questionnaires were introduced for two additional concepts to be examined: 1) thought Suppression; measured by the White Bear Suppression Inventory (WBSI); and 2) dissociation; measured by the Dissociative Experiences Scale (DES; see measures below). These were completed by 70 and 71 students respectively from the original sample. These two questionnaires created four additional groups, the high and low dissociators and thought suppressors respectively.

Procedure

All subjects participated voluntarily and received course credit. Ethics approval for the study was obtained from the Ethics Committee of the Psychology Department, University of Hertfordshire. The participants were seen individually by the author and completed the research assessment in the same order as follows. First, they were briefly informed about the nature of the study and asked to read and sign a consent form which was provided along with an information sheet explaining in more detail all aspects of the research (both can be found in Appendix B) . Subsequently a 12 x 12 LERG was administered in its paper and pencil form followed by four self-report questionnaires in no particular order (see measures below). Each individual assessment took, on average, one hour to complete. All students were debriefed at the end of their assessment due to

a potentially distressing situation created by the revelation and discussion of some stressful personal experiences elicited during the LERG administration. There was a single case of a student who complained about feeling distressed after taking part in the study, which resulted in revising the research information sheet by making more explicit the potentially distressing nature of the study and adding more contact details of people who could provide, if needed, a counselling service to the participant.

Measures

Repression: The assessment of repression was based on Weinberger et al's (1979) definition of the concept, which is based on a pattern of scores obtained from two questionnaires measuring defensiveness and trait anxiety (Weinberger 1979).

Defensiveness was measured by the Marlowe-Crown, Social Desirability Scale (MCSD; Crown, 1960). The MCSD is a well validated 33-item questionnaire, with 1-month test-retest reliability of 0.89 and internal consistency of 0.88, in which higher scores indicate increased defensiveness. The scale items consist of statements describing socially desirable ways of acting (e.g. "I am always courteous, even to people who are disagreeable") and the participant has to decide if the statement holds true for them or not ("true or false" answers only allowed).

Trait anxiety was assessed by the trait anxiety scale of the State-Trait Anxiety Inventory (STAI-T; Spielberger 1983). The STAI-T is a 20-item questionnaire which asks the participants to think about the way they generally feel and based on that to then indicate on a 4-point Likert scale (ranging from "almost never" to "almost always") the extent to which they agree with the scale's items which mainly describe emotional states (e.g. "I feel pleasant", "I am a steady person", etc). For university students the STAI-T has a 20-day test-retest reliability ranging between 0.76 and 0.86 and a median alpha coefficient of 0.90 (Spielberger et al, 1983).

By using the upper quartile of the normative distribution for the defensiveness score (Crowne 1964) and median split on the STAI-T, Weinberger et al (1979) proposed a method of identifying repressors by creating a fourfold classification of individuals as shown in Table 4.1. According to this classification the repressor group is defined as having high defensiveness along with low anxiety scores and the rest of the groups as having one of the remaining three combinations as follows: the low anxious

group (low anxiety/low defensiveness), the high anxious group (high anxiety/low defensiveness) and the defensive high anxious group (high anxiety/high defensiveness).

Table 4.1: Weinberger et al's (1979) fourfold taxonomy of coping styles

<u>Anxiety scores</u>	<u>Defensiveness scores</u>	
	<i>Low</i>	<i>High</i>
<i>Low</i>	Low anxious	Repressors
<i>High</i>	High anxious	Defensive High Anxious

Following Weinberger et al (1979), the upper quartile of the present sample's distribution was used for the Marlowe-Crowne scale, which was 19 and above as in the normative distribution (Crowne & Marlowe, 1964). The median STAI-T score in this sample was 41 which is only slightly higher from the score of 40 reported in the literature (e.g. Fox, 1994; Myers & Derakshan, 2000).

In regard to the number of participants identified in each individual group, in the present sample, the smallest was found amongst the low anxious group with 18 participants (15.7%), then the defensive high anxious group with 29 (24.5%), next the repressor group with 32 participants (28%), and finally the high anxious group with the highest number of 35 participants (30.7%).

The groups did not differ in regard to gender, $\chi^2(3, n=114) = 2.14, ns$, number of years post-stressful-event (SE), $F(3, 110) = 0.70, ns$, and age at which the stressful event took place, $F(3, 110) = 0.70, ns$. There was, however, a significant difference among some of the groups regarding their age: i) there was a difference in the mean age of the repressor (Mean = 24.1, SD = 7.6) and the high anxious group (Mean = 20.4, SD = 3.8), $F(3, 110) = 5.2, p = .01$; and ii) there was also a difference between the repressor and the defensive high anxious group (Mean = 19.55, SD = 1.7), $F(3, 110) = 5.2, p = .002$ (see Table 4.2).

Table 4.2: Comparison of groups on demographic variables (n =114)

	Repressors (N = 32)	Low Anxious (N = 18)	High Anxious (N= 35)	Def.Hig. Anxious (N = 29)	p
Age	24.1 (7.6)	20.5 (4)	20.4 (3.8)	19.5 (1.7)	Sig.
% Female	84.61	78.78	91.17	80.95	ns
Years post-SE	4.96 (5.53)	4.33 (4.58)	3.97 (3.98)	3.09 (3.52)	ns
Mean stress age	17.96 (5.47)	17.42 (4.69)	16.85 (3.98)	16.14 (3.91)	ns

Note: Numbers in parentheses are standard deviations. SE stands for Stressful Event. Age and Number of years post-SE are expressed in mean values.

Thought Suppression: The White Bear Suppression Inventory (WBSI: Wegner & Zanakos, 1994) was used to assess levels of thought suppression amongst participants (n = 70). The WBSI is a 15-item questionnaire which asks subjects to indicate on a 5-point

Table 4.3: Individual item correlations for the White Bear Suppression Inventory (WBSI) using the present study's sample.

Items	Correlation with scale total
1. There are things I prefer not to think about	0.23
2. Sometimes I wonder why I have the thoughts I do	0.43
3. I have thoughts that I cannot stop	0.50
4. There are images that come to mind that I cannot erase	0.57
5. My thoughts frequently return to one idea	0.45
6. I wish I could stop thinking of certain things	0.55
7. Sometime my mind races so fast I wish I could stop it	0.56
8. I always try to put problems out of mind	0.46
9. There are thoughts that keep jumping into my mind	0.53
10. Sometimes I stay busy just to keep thoughts from intruding on my mind	0.51
11. There are things that I try not to think about	0.58
12. Sometimes I really wish I could stop thinking	0.60
13. I often do things to distract myself from my thought	0.53
14. I often have thoughts that I try to avoid	0.62
15. There are many thoughts that I have that I don't tell anyone	0.21

Note: The correlations were calculated with the scale total minus the relevant item (N = 70).

Likert scale (ranging from 1 = strongly disagree to 5 = strongly agree) the extent to which they agree with statements shown in table 4.3.

Scores on the WBSI are summed for a total score to be produced ranging from 15 to 75. The scale used with a student sample has shown good internal consistency (Cronbach's alpha = 0.88) and a satisfactory test-retest correlation ($r = 0.78$, $n = 93$, $P < 0.01$) after 3-6 weeks (Hoping & de Jong-Meyer, 2003). There has been dispute over whether the WBSI actually measures only, or if at all, thought suppression or something different. Hoping & de Jong-Mayer (2003) have recently presented a two factor solution of the scale consisting of a major factor (explaining 38% of the variance) that has been described as "Unwanted intrusive thoughts" and only a minor factor (12% of the variance) described as "Thought suppression". Even more interestingly, it was the "Unwanted intrusive thoughts" factor that accounted for the WBSI's association with measures of psychopathology such as negative affect, obsessive-compulsive behaviour and vigilant coping. It could then well be that using the scale unidimensionally as a measure of

Table 4.4: Hoping & de Jong-Meyer's (2003) VARIMAX orthogonal two-factor solution for the WBSI combined with factor loadings from the present study's data (N = 70).

Items	<u>Factor loading</u>		
	1	2	3
Factor 1: "Unwanted Intrusive Thoughts"			
3. I have thoughts that I cannot stop	0.71	-0.02	0.18
5. My thoughts frequently return to one idea	0.59	0.30	-0.15
9. There are thoughts that keep jumping into my mind	0.69	0.30	-0.03
6. I wish I could stop thinking of certain things	0.58	0.20	-0.28
2. Sometimes I wonder why I have the thoughts I do	0.50	0.01	0.30
7. Sometime my mind races so fast I wish I could stop it	0.47	0.59	-0.01
12. Sometimes I really wish I could stop thinking	0.55	0.48	0.03
15. There are many thoughts that I have that I don't tell anyone	0.49	-0.36	0.30
4. There are images that come to mind that I cannot erase	0.73	0.19	0.08
Factor 2: "Thought Suppression"			
11. There are things that I try not to think about	0.24	0.31	0.76
14. I often have thoughts that I try to avoid	0.40	0.27	0.61
1. There are things I prefer not to think about	-0.08	0.05	0.81
8. I always try to put problems out of mind	0.13	0.69	0.36
13. I often do things to distract myself from my thought	0.15	0.83	0.08
10. I stay busy just to keep thoughts from intruding on my mind	0.18	0.67	0.25

thought suppression is not entirely adequate. Other researchers, however, have found the WBSI to be unidimensional (Wegner & Zanakos, 1994; Muris et al, 1996).

To examine if a similar pattern could emerge with the sample of the present study a principal component analysis was performed (see Tab. 4.4). The analysis used a Varimax rotation and revealed, as in the Hoping and Jong-Meyer study ($n = 202$), three factors with eigenvalues greater than 1.0. The first factor explained 34% of the variance with an eigenvalue of 5.19 (compared to 38% of variance with eigenvalue of 5.67 for the first factor in the Hoping & Jong-Meyer study). The second factor accounted for 11% of the variance with an eigenvalue of 1.74 (compared to 12% of variance with eigenvalue of 1.85 in Hoping & Jong-Meyer study). The third factor accounted for 10% of the variance and had an eigenvalue of 1.56 (there is no available information for the third factor in Hoping & Jong-Meyer study since a scree plot pointed them to a two factor solution). As can be seen in Table 4.4 the factor loadings for all items seem to fit the two factor solution proposed in Hoping & Jong-Meyer's study with two exceptions that could possibly be explained by the relatively small sample size employed in the present analysis ($N = 70$).

Firstly, item seven, which belongs to the first factor, according to Hopings & Jong-Meyer, seems to load more on the second factor (0.59) but it loads equally heavily on the first factor (0.47) according to the present analysis. Secondly, items eleven, fourteen and one seem to load on the third factor, whereas according to Hoping & Jong-Meyer they belong to the second factor. By considering the content of those three items, however, we can easily detect that it is more sensible to be categorized together with items eight, thirteen and ten under the "thought suppression" heading since they seem to describe quite similar phenomena. An alternative categorization proposed by Blumberg (2000) suggests a three factor solution in which a separate category is created under the heading of "self-distraction" including items thirteen, ten and twelve.

The total score was calculated for each participant by adding up all items on the WBSI. Median split of the total scores was subsequently used to distinguish between the high and low thought suppressors groups. The median was found to be 52.5, which was rounded up to 53. The high thought suppression group was created by scores starting from 54 and above on the WBSI.

Table 4.5: Comparison of thought suppression groups on demographic variables (N=70)

	High thought suppress. (N = 29)	Low thought suppress. (N = 41)	P
Age	20.6 (3.3)	22.2 (6.4)	ns
% Female	86.2	75.6	ns
Years post-SE	3.9 (4.6)	3.9 (4.6)	ns
Stress age	16.6 (4.3)	18.3 (4.6)	ns

Note: Numbers in parentheses are standard deviations. All except the % Female measure are expressed in mean values.

The groups did not differ significantly in regard to gender, $\chi^2 (1, n = 70) = 1.1$, ns, although the percentage number of females in the high thought suppressor group is larger. There were also no significant differences in the number of years post-stressful-event (SE), $F (1, 68) = .03$, ns, current age, $F (1, 68) = 1.3$, ns, and age at which the stressful event took place, $F (1, 68) = 1.5$, ns (see Table 4.5).

Dissociation: The Dissociative Experiences Scale (DES: Bernstein and Putnam, 1986) with a slightly modified scoring system was used to assess levels of dissociative experiences amongst the participants ($n = 71$). The scale is a self-report questionnaire consisting of 28 items with a good test-retest reliability of 0.84, within 4-8 weeks, and good convergent and discriminant validity. The participants were asked to write down next to each scale item a number ranging from 0%-100%. The number indicated the percentage of time the participants thought that they regularly spend within the states of consciousness described by the items (e.g. "driving a car and suddenly realizing that they don't remember what has happened during all or part of the trip"). Later, the data were either rounded up or down to the nearest number in units of 5%. The mean score was calculated for each participant by adding up the score of each individual item and dividing by 28. Median split of the mean scores was subsequently used for distinguishing between the high and low dissociator groups. The median was found to be 23.66 which was rounded up to 24. The high dissociator group was created by scores starting from 25 and above on the DES.

The groups did not differ significantly in regard to gender, $\chi^2 (1, n = 70) = 2.9$, ns, although as in the case of thought suppression the number of females is larger in the high score group. There were no significant differences again in the number of years

post-stressful-event (SE), $t(68) = 1.6$, ns, current age, $t(68) = 1.5$, ns, and age at which the stressful event took place, $t(68) = .20$, ns (see Table 4.6).

Table 4.6: Comparison of dissociation groups on demographic variables (N =71)

	High dissociators (N = 31)	Low dissociators (N = 39)	p
Age	20.7 (4.4)	22.8 (6.5)	ns
% Female	87.0	74.3	ns
Years post-SE	3.0 (3.1)	4.9 (5.6)	ns
Stress age	17.6 (4.4)	17.8 (4.8)	ns

Note: Numbers in parentheses are standard deviations. All except the % Female measure are expressed in mean values.

Life Events Repertory Grid (LERG): The LERG is a variant form of Kelly's (1955) grid form of the Role-Construct Repertory Test (Rep Grid). It was developed by Sewell (1991), although similar versions can be found elsewhere (Fransella, Bell & Bannister, 2004). The Repertory Grid is a well established assessment measure of conceptual structure (Fransella, Bell & Bannister, 2004; Neimeyer, 1985; Smith, 2000; Winter, 1992) which "provides a rare combination of an idiographic approach coupled with objectivity in scoring" (Winter, 2003, p.27).

The LERG used in the present study consisted of twelve elicited elements and constructs (12 x 12). The elements were elicited by asking the participant to provide alternatively a positive and a negative event from specific periods in their lives including the most stressful event they have ever experienced (see Appendix B for the list of the events' descriptions used for the element elicitation). Element number eight was the only one for which the participant was given the choice of deciding for themselves whether to provide a positive or a negative event. Given the evidence in the literature that at least one of the coping styles examined in the present study, that is repression, might relate to difficulties recalling negative autobiographical memories (Myers & Brewin, 1995), element number eight was used to measure if such a difference exists between the groups.

The triad method was used (Kelly, 1955) for the elicitation of the constructs. The participant was presented with three elements written on paper cards, at a time, and

asked “how are two of these alike in some important way in which they are different from the third?” (Kelly, 1955). The participant’s answer to this question provided the emergent pole of the construct. Subsequently the participant was asked to define what is the opposite of the emergent pole and that became the contrast (or implicit) pole of the construct. The participant was asked then to indicate for each pole of the construct if they thought of them as positive, negative, or as something that could be characterized as both positive and negative at the same time. The participant did that by assigning a plus symbol (+) if they thought of the pole as positive, a minus (-) if they thought it was negative and a plus-minus symbol (\pm) in case they thought that the pole contained both qualities.

In total, twelve different triads of the elicited elements were presented containing the following combinations: five of the triads consisted of the most stressful event (SE) in the participant’s life along with one positive and one negative event, either two or three triads contained the SE along with two negative events (two, in case element number eight was positive and three in case it was negative); similarly, either two or three triads contained the SE together with two positive events; the remaining two triads contained at least one positive or negative element without including the SE. Slight deviations from the schedule of combinations described above could take place in case the participant was unable to detect similarities in any given triad and different combinations were requested, in which case an effort was made for the general procedure to be followed as closely as possible.

The elements were rated according to each individual construct on a six-point Likert-type scale on which ratings from 1 to 3 indicated that the element was related/connected to the emergent pole (1 denoting the strongest possible connection between the element and the pole, 2 somewhat less and number 3 was the “neutral” choice, when the participant felt that the pole does not really relate to the element but still belonged to that side of the construct). Ratings ranging from 4 to 6 on the scale indicated the element’s connection with the contrast or implicit pole (6 denoting the strongest possible connection, 5 somewhat less and 4 being the “neutral” choice).

The participants were also asked to provide a “rating of stressfulness” for the SE by answering the question: “How would you rate your SE on a scale from one to ten if ten represents the highest possible score of stressfulness on the scale?” Considering that the SE actually represents an entirely different event uniquely experienced by each individual participant, there was a need to assess the subjective intensity of its impact in

the participant's life. Also, the age at which the participant was at the time when the SE happened was also requested and recorded. In this way the chronological distance between the time of the SE taking place and the present was calculated. Such a measure would be useful as a possible modulator of the impact of the SE, one that is routinely reported in the life events and PTSD literature.

Grid measures:

i) Distance measures: The mean distance between the SE and the rest of the events-elements as well as the mean distance between all events-elements excluding the SE were calculated by hand and subsequently compared. Smaller values indicate elements are being construed more similarly and larger values that they are being construed differently.

ii) Conflict: The concept has been used interchangeably with other terms such as "inconsistency", "contradiction" and "imbalance" and is an indication of the degree of elaboration of a construct system. Here, following Bell (2004b) conflict was operationalised as existing within a grid when either: 1) "An element is at the same time close to two constructs which are themselves different or distant" or 2) "An element is similar or close to one construct's pole and at the same time is different to, or distant from another construct's pole, where the two construct poles are similar or close" (Bell, 2004b, p.54). The overall percentage of conflict within grids as well as the percentage of conflict associated with each individual element was assessed using the computer software programme GRIDSTAT (Bell 1998).

iii) Variability of Intensity: This measure can be used as another index of elaboration within a grid and was provided by GRIDSTAT's computation of the standard deviation of the sum of squared-multiple correlations between constructs.

iv) Extremity of rating: Since the use of extreme ratings on a scale has been shown to have links to certain personality attributes or even indicate pathology (O'Donovan 1965; Hamilton 1968; Sewell 1996), the extreme ratings (1 and 6) used in the grids were counted for each individual element.

v) Construct poles' valence: Assigning predominantly the negative valence (-) to the emergent pole and using the combined positive and negative valence (\pm) less often characterized a clinical PTSD group when compared to a non-clinical control group (Sewell 1996). Three aspects of valence were measured: 1) The number of negative valence assigned to the emergent pole, 2) The total number of negative valence in the grid and 3) The overall number of the combined positive and negative valence option (\pm).

vi) Index of elaboration of the stressful event (SE): This index was calculated by subjecting the grids to hierarchical classes analysis (De Boeck & Rosenberg, 1988) using the HICLAS computer software programme (De Boeck, 1992) . The HICLAS index of elaboration provides a measure of how well integrated an element is within a person's construct system. The index for the SE was calculated and then compared with the mean level of elaboration of the rest of the elements.

4.3. Results

Calculation of the elaboration index of the stressful event via TUCKER-HICLAS

The data were entered into the programme in a “semi-binary” fashion using the combined clustering form as in the PTSD study (Chapter Two). Rank 4 was considered the most appropriate rank to conduct the analysis using exactly the same criteria explained in Chapters 2 & 3. The present analysis provided information specifically about two measures:

i) **Elaboration measure:** a comparison between the index of elaboration of the stressful event and that of the comparison positive event (element No3) was conducted. The analysis revealed that there were no significant differences between the elaboration index of the stressful element ($M = 3.50$, $SD = 1.35$) and that of the comparison element ($M = 3.54$, $SD = 1.32$, $t(113) = .27$, $p = .78$) across the groups ($N = 114$). When paired-samples t-tests were conducted within each individual group there were found to be no significant differences regarding the same measure with the only exception of the low dissociation group, in which the comparison element ($M = 3.5$, $SD = 1.46$) was found to be significantly more elaborated than the stressful event ($M = 3$, $SD = 1.36$, $t(38) = 2.18$, $p = .03$) with eta squared ($= .10$) showing a large effect. A one-way between-groups ANOVA analysis also failed to reveal any significant differences regarding the elaboration index of the stressful element between the four original groups, $F(3, 110) = .85$, $p = .46$ (Note: the four original groups refer to the categorization of the whole student sample ($N = 114$) according to the MCSD and STAI-T scales, see Table 4.1 in the Method section). Independent samples t-tests conducted separately for the suppression and dissociation groups (see Tables 4.5 & 4.6 respectively in the Method section) revealed no significant differences as regards the elaboration index of the stressful element.[†]

[†] A two-tailed test of significance was used in all statistical testing reported in this section .

- ii) **Strength of association measure:** a comparison between the strength of association of the stressful event and that of the comparison event (elem. No3) was conducted. There were found to be no significant differences between the strength of association of the stressful event with its associated construct classes ($M = 2.64$, $SD = .61$) and that of the comparison event with its associated construct classes ($M = 2.65$, $SD = .60$, $t(113) = .22$, $p = .82$) across the groups ($N = 114$). When paired-samples t-tests were conducted within each individual group there were found to be no significant differences regarding the same measure. An ANOVA analysis also failed to reveal any significant differences regarding the strength of association of the stressful as well as of the comparison event between the four original groups ($N = 114$). Independent samples t-tests conducted separately for the suppression and dissociation groups (see Tables 4.5 & 4.6 respectively in the Method section) also revealed no significant differences between the groups.

Calculation of the superordinacy index of the stressful event via GRIDSTAT

In the overall student sample ($n = 114$) the stressful event appeared to assume a symmetric status, meaning that the average predicting and being predicted coefficients were equal or almost equal, in the majority of the cases (42.1%). In 38.6% of the participants the stressful event appeared as superordinate (or predicting, meaning that the average predicting coefficients were considerably larger than the predicted ones). In 19.3% of the participants the stressful event appeared as subordinate (or predicted, meaning that the average predicted coefficients appeared considerably larger than the predicting ones). It should be noted here that the subordinate category, unlike in the student sample, was totally absent in the PTSD sample (Table 4.7).

Table 4.7: A comparative presentation of GRIDSTAT categories in the student and PTSD samples.

<u>GRIDSTAT classification types:</u>	<u>Students (n = 114)</u>	<u>PTSD sample (n = 36)</u>
Superordinate	38.6%	69.4%
Subordinate	19.3%	0%
Symmetric	42.1%	27.7%

Note: In the PTSD sample a 2.7% (not appearing in the table) belonged to the fragmented category, which was absent in the Student sample.

While the PTSD data seem to point to a certain direction by suggesting the mainly superordinate status of the trauma event, the student data, on the other hand, present us with a more diffuse picture where there seems to be a prevalence of a “symmetric” solution.

The question of whether the student groups differed according to the above GRIDSTAT categories was explored via chi-square testing. In order to increase interpretability the least popular and meaningful “fragmented” category was incorporated into the “symmetric” one. This choice could further be supported by the fact that the predicting and predicted coefficients appear most often as equal or symmetric within the fragmented category and as such the latter could be seen as a subcategory of the symmetric or equal.

The only significant difference appeared to be between the low anxiety and the high anxiety groups, $\chi^2(2, 53) = 7.49, p = .024$. In the former group the stressful event appeared to be significantly more superordinate than in the latter group. Also, the symmetric category was significantly more prominent in the high anxiety group (Tab. 4.8).

Table 4.8: The percentage of GRIDSTAT categories found in the Low & High anxiety groups.

<u>Groups</u>	<u>Superordinate</u>	<u>Subordinate</u>	<u>Symmetric</u>
Low anxious	61%	27.8%	11.2%
High anxious	31.4%	20%	48.6%

The results in Table 4.8 look counterintuitive since, according to the findings of the PTSD study (Chapter Two), the stressful event would be expected to have a superordinate position in the high rather than the low anxiety group.

Principal components analysis

A one-way between-groups ANOVA performed to investigate differences between the groups regarding the mean percentage of variance accounted by their first principal components, revealed no significant differences amongst them.

Pythagorean distances

A comparison, using paired-samples t-tests, between the mean Pythagorean distance of the stressful element from the rest of the elements and the mean Pythagorean distance between all the rest of the elements across the groups revealed no significant differences. That is an indication that the stressful event was construed in similar terms to the rest of the events in all group types.

Stress intensity

There were found to be no significant differences among the groups, using one-way between groups ANOVA, regarding the subjective measure of stress reported by the participants as an indicator of the intensity of the stress they felt they had experienced during the stressful event (element 7).

Extremity ratings

The mean extremity of ratings (1s and 6s on the grid's six point scale) was first calculated by summing up the extremity scores of all elements (not including the extremity score of the stressful event, element No 7) and dividing this by 11. Paired-samples t-tests performed for the mean extremity and the stressful event extremity scores revealed certain differences between these two measures as summarized in Table 4.9.

Results show that the extremity score of the stressful event appears as significantly larger than the mean extremity score mainly in those groups characterized by low Trait anxiety. The only exception to this pattern appears to be the high suppressor group, which although it contains significantly higher levels of trait anxiety compared to the low anxiety groups

Table 4.9: Results from paired-samples t-tests for the measures of mean extremity and stress extremity across the groups.

<u>Groups</u>	<u>Means (SD)</u>	<u>t values (df)</u>	<u>p values</u>
Low anxious	M.extr.= 5.3(1.9) Str.extr.= 7.6(3)	4.61 (17)	.0001, sig.
Repressors	M.extr.= 6.3(1.6) Str.extr.= 7.4(2.5)	3 (31)	.005, sig.
High anxious	M.extr.= 6.1(1.7) Str.extr.= 6.7(3)	1.2 (34)	.20, n.s
Def. high anxious	M.extr.= 5.8(1.7) Str.extr.= 6.7(2.8)	1.6 (28)	.11, n.s
Low dissociators	M.extr.= 5.8(1.7) Str.extr.= 7.4(2.7)	3.6 (38)	.001, sig.
High dissociators	M.extr.= 6.2(1.4) Str.extr.= 6.9(2.4)	1.6 (30)	.11, n.s
Low suppressors	M.extr.= 6(1.4) Str.extr.= 7.1(2.6)	2.6 (40)	.01, sig.
High suppressors	M.extr.= 5.9(1.8) Str.extr.= 7.5(2.3)	3.6 (28)	.001, sig.

(such as the low anxious, repressor, low dissociation and low suppressor groups), nevertheless appears to share their common characteristic, which is the higher extremity score of the stressful event in comparison to the mean extremity score, $F(7, 246) = 16.2, p =$

.001. This observation could potentially point to a possible mediating effect of thought suppression that may be able to supersede or even cancel the effects of trait anxiety. Overall, the present findings may look counterintuitive since high extremity scores have been linked in the literature with high rather than low anxiety states as well as psychopathology (Neimeyer, 1985; Winter, 1992; Sewell et al, 1996).

Construct valence measures

One-way between-groups ANOVA revealed no significant differences across groups regarding the following four measures: i) the number of times participants assigned a negative valence to the emergent pole; ii) the number of times participants assigned a negative valence to the implicit pole; iii) the overall number of negative valences in a grid and iv) the overall number of times participants assigned the mixed positive and negative valence, independently of a pole.

Furthermore, paired-samples t-tests conducted across the groups also did not reveal any significant differences between the number of negative valence assigned to the emergent poles of the grids compared to the number of negative valences assigned to the implicit poles. The reader is reminded here that in the PTSD sample (see Chapter Two) the emergent poles of the grids were assigned negative valences significantly more often than the implicit poles.

Variability of intensity

One-way between-groups ANOVA revealed no significant differences across groups regarding this measure of a personal construct system's elaboration.

Conflict measures

Three measures of conflict, as calculated via GRIDSTAT, were assessed: i) the total amount of conflict found in each grid; ii) the amount of conflict contained within the stressful event; iii) a comparison between the amount of conflict assigned to the stressful event and the mean conflict of the rest of the elements/events. One-way between-groups ANOVA testing for the first two measures revealed no significant differences. Paired-samples t-tests also failed to reveal any significant differences for the third measure.

Types of stressful events

A classification of the stressful events experienced by the participants was performed following theory-based distinctions suggested in relevant literature (see, Slane, Dragan, Crandall, & Payne, 1980). It was decided accordingly that the two categories of i) interpersonal and ii) situational stress will be used for the classification.

Interpersonal stress was defined as that type of stress resulting from problems arising within social relations (e.g. breaking up with a partner, arguments with parents etc). Situational stress, on the other hand, was defined as stress deriving from situations that are not the product of social interaction or conflict (e.g. car accidents, illnesses, examinations, etc).

The author along with a research colleague (RC) independently classified the most stressful events reported by participants (element 7) within the two aforementioned categories. There was a very high inter-coder agreement between the author's and the RC's classification (Kappa = 0.98).

Altogether, 65.3% of the participants' stressful events were classified as belonging to the situational stress category and the rest, 34.7%, as belonging to the interpersonal stress category (see Figure 4.1).

Furthermore, in order to examine if the participant groups, as defined according to the questionnaire measures, differed in terms of the types of trauma they contain chi-square tests were performed. The following groups were found to contain significantly different percentages of the two types of stressors:

i) the stressful events reported by the low anxious group belonged to the interpersonal category significantly more often than those reported by the high anxious group, $\chi^2 (1, n = 53) = 4.92, p = .02$ (see Table 4.10).

ii) the stressful events reported by the high suppression group belonged to the interpersonal category significantly more often than those reported by the low suppression group, $\chi^2 (1, n = 70) = 3.98, p = .04$ (Table 4.10).

iii) a comparison between the high anxious and the high suppression groups also revealed significant differences, $\chi^2 (1, 64) = 5.82, p = .01$. (* It should be

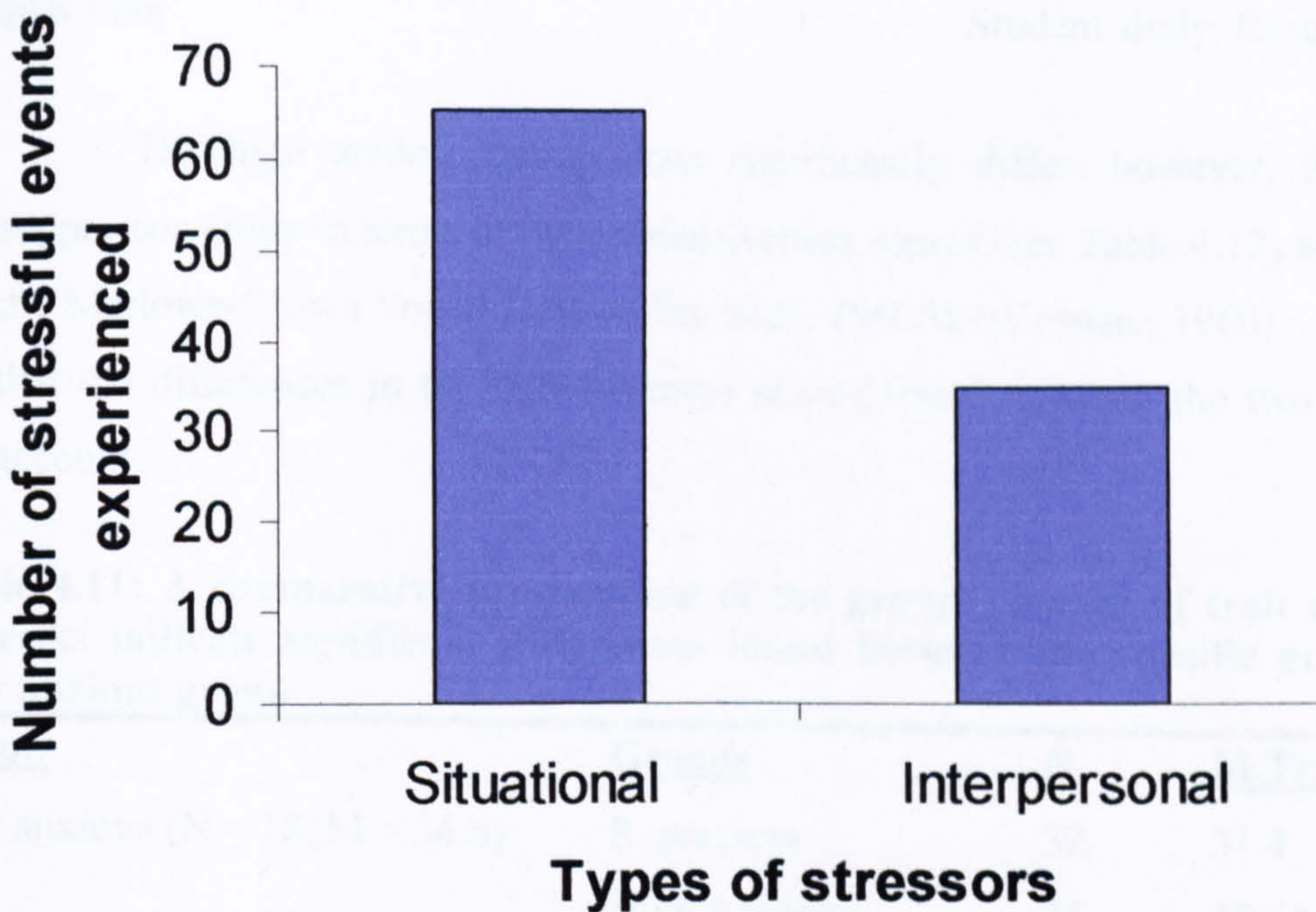


Fig. 4.1: A diagrammatic representation of the number of stressful events contained in the two types of stressors within the overall student sample (N = 114).

noted that a certain limitation applies to this comparison since the two groups share 8 subjects. However, the fact that the two groups appear to be significantly different despite the sharing of a number of participants shows that the actual differences might be even greater.). Interestingly, this last comparison points to the fact that the differences found in the first two comparisons cannot be solely attributed to the different levels of anxiety contained in the respective groups since, although, the high anxious and the high suppression group share similar levels of anxiety they do however differ in terms of the types of stress reported (see Table 4.10)

Table 4.10: The percentage of the two types of stress as reported by the groups.

<u>Groups</u>	<u>Situational stress</u>	<u>Interpersonal stress</u>
Low anxious	38.9%	61.1%
High anxious	74.3%	25%
Low suppressors	68.3%	31.7%
High suppressors	41.4%	58%

The high anxious group does significantly differ, however, from the high suppressor group in terms of their defensiveness scores (see Table 4.12) as measured by the Marlowe-Crown Social Desirability Scale (MCSD:(Crowne, 1960). A conclusion that the differences in the defensiveness scores found between the two groups could account

Table 4.11: A comparative presentation of the groups' means of trait anxiety. The asterisks indicate significant differences found between the specific group and the Low anxious group

<u>Group</u>	<u>Groups</u>	<u>N</u>	<u>M.Trt.Anx.</u>
Low anxious (N = 18, M = 34.6)	Repressors	32	31.4
	High Anxious	35	48.6*
	Def. High Anxious	29	47.6*
	Low Dissociators	39	39.3
	High Dissociators	31	46.2*
	Low Suppressors	41	38.8
	High Suppressors	29	46.7*

for the different types of stress reported by each group does not seem adequate since in that case we would also expect to see significant differences between the high anxious and the defensive high anxious groups but there are not any regarding the type of stress reported.

Table 4.12: A comparative presentation of the groups' means of defensiveness. The asterisks indicate significant differences found between the specific group and the Low anxious group.

<u>Group</u>	<u>Groups</u>	<u>N</u>	<u>M.Defens.</u>
Low anxious (N = 18, M = 11.1)	Repressors	32	19.2*
	High Anxious	35	11.9
	Def. High Anxious	29	19.4*
	Low Dissociators	39	17.1*
	High Dissociators	31	15.8*
	Low Suppressors	41	17.2*
	High Suppressors	29	15.5*

The last finding points towards considering the thought suppression variable as an independent contributor to the type of stress reported by the participants.

Valence of element No 8

As already mentioned in the Method section, element number eight was the only one for which the participants were given the choice of deciding for themselves whether to provide a positive or a negative event. Given the evidence in the literature that at least one of the coping styles examined in the present study, that is repression, might relate to difficulties recalling negative autobiographical memories (Myers & Brewin, 1995), element number eight was used to measure if such a difference exists between the groups. It was therefore hypothesized that repressors would more readily provide a positive event when asked compared to other groups.

Chi-square tests failed to support the aforementioned hypothesis since it was found that the low anxious group was actually the one that had the highest percentage of recalling a positive event (see Table 4.13). Moreover, the low anxious group differed significantly only in regard to the high dissociation group, which is characterized by high trait anxiety scores, $\chi^2 (1, n = 49) = 4.01, p = .045$ (*there was one common subject between the groups).

Table 4.13: Percentage of positive and negative valence assigned to element No 8 in different groups.

<u>Valence</u>	<u>Low anxious</u>	<u>Repressors</u>	<u>High anxious</u>	<u>High Dissociat.</u>
Positive	94.4% (sig.)	78% (n.s)	68.6% (n.s)	64.5% (sig.)
Negative	5.6% (sig.)	22% (n.s)	31.4% (n.s)	35.5% (sig)

Results indicate that generally low anxiety (see the low anxious and repressors groups, Table 4.13) relates to a more frequent recall of positive events. Contrary to the proposed hypothesis in the literature (Myers & Brewin, 1995), however, defensiveness not only does not seem to add to this effect but rather it seems to reduce it (cf. the low anxious and repressor scores, Table 4.13).

Correlation analysis

First, a Pearson product-moment correlation analysis was performed for all the questionnaire measures used in order to establish their specific relations within the present sample. As can be seen in Table 4.14, social desirability or defensiveness (MCSD) has a weak negative correlation with Trait anxiety (STAI-T) and thought suppression (WBSI) while it correlates positively but equally weakly with dissociation (DES). Trait anxiety has a medium positive correlation with Thought suppression. Finally, thought suppression also has a medium positive correlation with dissociation.

Table 4.14: Pearson product-moment correlations between questionnaire measures.

<u>Quest/naires</u>	<u>MCSD</u>	<u>Trait Anxiety (STAI-T)</u>	<u>WBSI</u>	<u>DES</u>
MCSD				
Trait Anxiety (STAI-T)	-.21*(n=114)			
WBSI	-.27**(n=70)	.46**(n=70)		
DES	.19*(n=70)	.18	.31**(n=70)	

* p < .05

** p < .01

Subsequently, a Pearson product-moment correlation analysis was performed between questionnaire, grid, and demographic measures. As can be seen in Table 4.15 there were only a few small correlations found between these measures. Perhaps the most informative correlation amongst them is the positive medium sized one between Stress and the Stress extremity measure. This correlation provides some support to the conceptualization of extreme rating as an indication of psychological distress.

Table 4.15: Pearson product-moment correlations between questionnaire, grid, and demographic measures (* $p < .05$, ** $p < .01$)

	<u>MCSD</u>	<u>Trait Anxiety</u> (n= 114)	<u>WBSI</u> (n=70)	<u>DES</u> (n=70)	<u>Stress</u> (n=114)
Stress Age	.06	-.05	-.19*	-.16	.21
Age	.02	-.19*	-.09	-.23**	.18*
Time since St.	-.03	-.05	.07	-.14	.09
1 st Comp.	.12	-.08	-.01	-.18*	-.02
Variab. Inten.	.03	-.03	-.09	-.07	.04
Neg. Impl.	-.01	.01	-.16*	-.20*	-.05
Neg. Emer.	.13	-.12	-.15	-.15	.09
Over.Pos.Neg.	-.15	.15	.13	.09	-.14
Mean Extr.	.01	.08	-.04	.02	.21*
Stress Extr.	.03	-.06	.04	-.12	.43**

Finally, Pearson product-moment correlation analyses were performed between questionnaire, grid, and demographic measures separately for each participant group. Table 4.16 shows the significant correlations found in each individual group. To assist interpretability of the results those cells containing more than one correlation (see Table 4.16) were assigned the labels “mixed” or “uniform” based on whether the groups contained had similar (therefore “uniform”) or dissimilar (therefore “mixed”) levels of trait anxiety (see Table 4.11 for an understanding of the classification criteria used). This classification was based on findings from the present study which indicated that levels of trait anxiety often act as a possible mediating factor in a number of differences observed between groups.

Results from the “uniform” groups

i) **The low trait anxiety groups (1, 2, 5, 7):** In the repressor (2) and Low dissociation (5) groups the reported stress correlated positively with their age (.38* and .31* respectively). Interestingly, the low anxious group (1) differed from the repressor group (2) in terms of the first having a negative correlation between “time since stress” and “stress” assigned to the stressful event (-.49*), while in the repressor group (2) the correlation between the two measures is actually positive (.37*) pointing to possible psychological maladjustment following a stressful event in the latter group.

Finally, positive correlations were found between the stress and mean extremity measures in the low anxious (1), low dissociation (5), and low thought suppression (7) groups (.53*, .32*, .33* respectively). This finding may seem counterintuitive, and thus unexpected, since high extremity scores often underlie high rather than low anxiety states and have been shown to relate to several indices of psychopathology.

ii) **The high trait anxiety groups (3, 4, 6, 8):** There was only one such grouping in which Age positively correlated with mean extremity in the high dissociation (6) and high thought suppression (8) groups (.38* and .43* respectively).

Results from the “mixed” group

There were found to be strong positive correlations for both the low trait anxiety (1, 5, 7) and the high trait anxiety (3, 4) groups between the measures of stress and the stress extremity scores (Table 4.16).

Finally, there were also some single group significant correlations (see Table 4.16) which will be discussed here following the aforementioned distinction between high and low anxiety. Within the low anxiety category first, there was a strong negative correlation (-.56*) between the defensiveness/social desirability measure (MCSD) and the “time since stress” event in the low anxious group (1). In the low anxious group (1) the MCSD scale also appears to correlate strongly and positively with the “overall negative” valence measure (.49*) and, as expected, strongly but negatively (-.48*) with the “overall positive and negative” measure. These correlations indicate that, at least within the low anxious group, elevated levels of defensiveness/social desirability could signify elevated levels of psychological distress. In the repressor group (2) there was a positive correlation between the trait anxiety (STAI-T) and the “mean extremity” measures (.36*). In the low thought suppression group (7), finally, there was a medium positive correlation between the “time since stress” and the first component measure (.34*).

In the high anxiety groups there were two altogether significant correlations. First, in the High anxious group (3) there was a negative correlation between age and “stress conflict” (-.40*), indicating that older individuals tend to elaborate less their most stressful event. In the high dissociation group (6) there was found to be a significant positive

correlation between Age and the “First principal component” measure, indicating that older participants in this group tended to have more tight or one-dimensional types of construing.

Table 4.16: Pearson product-moment correlations between questionnaire, grid and demographic measures in regard to specific participant groups.

	<u>M.C.S.D</u>	<u>Tr.Anx.</u> <u>(STAI-T)</u>	<u>W.B.S.I</u>	<u>Age</u>	<u>T.S.S.</u>	<u>Stress</u>
Age	-.38*(4)		.46*(8)			
T.S.S.	-.56*(1)					
Stress				.38*(2) .31*(5) (uniform)	-.49*(1) .37*(2) (uniform)	
Ov.Neg.	.49*(1)					
Ov.Po.Neg.	-.48*(1)					-.32*(5)
Mean.Extr.		.36*(2)		.38*(6) .43*(8)		.53*(1) .32*(5) .33*(7) (uniform)
Str.Extr.						.53*(1) .33*(3) .57**(4) .61**(5) .56**(7) (mixed)
Str.Confl.				-.40*(3)		
First.Comp.				.39*(6)	.34*(7)	

-Numbers in brackets indicate participant groups as follows: (1)Low anxious; (2)Repressors; (3) High anxious; (4)Defensive high anxious; (5)Low dissociators; (6)High dissociators; (7)Low though suppressors; (8)High thought suppressors.

-The “Uniform” and “Mixed” labels indicate that the groups found in the specific cells either share or not share similar levels of Trait anxiety respectively.

-T.S.S = time since trauma.

A summary of the main findings

I) Findings related to the Stressful Event (SE):

- The SE was found to be superordinate significantly more often in the low anxiety group than in the high anxiety group.
- The SE was found to be significantly more extremely construed in comparison to the mean extremity only in the low anxiety groups (i.e. low anxious, repressors, low dissociators, and low suppressors groups). From the high anxiety groups only the high suppressor group exhibited the same feature.
- The SE was found to belong to the interpersonal stress category in both the low anxiety and the high suppression groups.

II) The highest recall of positive events for element No 8 (for which participants themselves decided whether to provide a positive or a negative event) was recorded in the low anxiety group.

III) In the repressor group only there was found to be a significant positive correlation between the measures of “stress” and “time since stress”.

4.4 Student Discussion

The question of whether the personality traits of repression, suppression, dissociation, and high/low anxiety could be associated with maladaptive patterns of construing negative experiences was examined. The types of construing found to characterise each one of these personality traits were subsequently compared to the pattern of construing used by people suffering from post-traumatic stress disorder (see Chapter Two).

For the purpose of reminding the reader here, the author found that the following features seem to characterise the way PTSD patients construe their experiences: i) over-elaboration of their trauma experience; ii) excessive negative appraisals of events; iii) trauma appears as superordinate within the conceptual structure; iv) tight/one-dimensional construing; v) extreme rating of their trauma and vi) trauma appears distant, within psychological space, from the rest of the individual's experiences.

Overall, the results of the present investigation could be regarded as unexpected and counterintuitive. The generally considered as immature and maladaptive defences of repression, suppression and dissociation, along with their multiple connections with psychopathology, were expected to be closer to the type of construing characteristic of PTSD. The fact that people exhibiting those traits are also characterized by high anxiety scores (with the exception of repression) supported even further the above expectation, given that anxiety is a hallmark symptom of PTSD. Results have shown, however, that by far the greatest number of similarities with the PTSD pattern of construing appeared in those groups where low anxiety was the norm.

In summary, the stressful event (SE) was found to be superordinate significantly more often in the low anxiety group compared to the high anxiety groups (defensive and non-defensive high anxiety, high dissociation, high suppression). Since the trauma event in the PTSD group was found to be superordinate in the majority of the cases the expectation was that a high rather than a low anxiety group would show a similar pattern. What it means for the stressful event to be construed as superordinate is that it has more implications within the individual's conceptual structure. By taking into account that the stressful event is a negative, sometimes traumatic, experience we can assume that its

negative implications would be more far reaching the more superordinate it is construed by the individual to be.

Also, the SE was found to be construed significantly more extremely within all the low anxiety groups (low anxiety, repression, low dissociation, low suppression). As the significance levels revealed (see Table 4.9), the low anxious group appeared to have the most extremely rated SE, compared to the mean extremity, than any other low anxiety group. These findings may seem counterintuitive since high extremity scores have been linked in the literature with high rather than low anxiety states as well as psychopathology (Neimeyer, 1985; Winter, 1992; Sewell et al, 1996).

In an effort to try to make sense of these results, both for the superordinate position of the SE and its extreme rating in the low anxiety group, a distinction between process and content may prove useful. As we have seen there is a similarity regarding these two measures (process) in the PTSD and low anxiety group. What seems to be different between these two groups, among other, is that the excessive negative appraisals (content) of the PTSD group is absent in the low anxiety group. Comparisons between the student groups did not reveal any significant differences between them regarding the number of negative appraisals, which shows that the low anxious group did not differ in terms of content (negative appraisals) from the rest of the groups. In this regard, process on its own (extremity and superordinancy) could not produce negative implications for the individual without a correspondingly negative set of appraisals (content).

Having said that, the question might be posed of whether the process characteristics found in the low anxiety group could potentially lead to pathological reactions when low anxious individuals encounter an extremely stressful or traumatic event. This was actually the main focus of this study, namely, to investigate whether the characteristics of these groups could potentially function as possible antecedents or maintaining and perpetuating factors of the disorder. The question of whether low anxiety is a risk factor for maladaptive psychological reactions in case of a traumatic encounter cannot, however, be answered with the present data and could only be addressed within a prospective longitudinal design.

Another point of interest is the finding that the high extremity scores, found to be common among the low anxiety groups, were also found among the high suppression group, which was the only one from the high anxiety groups sharing this feature. Searching

for possible connections that would explain such similarities between the high suppression group and the low anxious groups it was found that the SE in the former was characterised by the interpersonal type of stress commonly found in the latter (see Table 4.10). That means that both high suppressors and low anxious individuals report more often, compared to high anxious individuals, interpersonal type of stressors when describing their most stressful event of their lives. These results seem once again counterintuitive since both high suppression and interpersonal stressors have been reported as having connections with psychopathology indices, which are not normally associated with low levels of anxiety.

The literature on interpersonal stress (IS) has emphasized its adverse psychological, physical, and biochemical effects on people and has been reported to be a major predictor for elevated psychological stress (Bancila, Mittelmark, & Hetland, 2006; Rudolph, 2002). More specifically, Robbins, Meyersburg and Tanck (1974) reported a positive relationship between IS and the tendency to report physical complaints and specific symptoms such as back problems and dizziness. In their study, Hashimoto and Nagoya (1997) found that the most prominent factor of distress was IS and also that the positive effects of social support were less significant than the negative aspects of interpersonal relations. Al'Absi, Bongard and Lovallo (2000) have reported that an interpersonal stressor produced greater adrenocorticotropin response, an indication of stress, when compared with a non-social stressor. Stressor specific effects were also reported by Joiner and Schmidt (1995) who found that high levels of IS, but not achievement-related stress, increased levels of depression among certain groups of men.

The literature on thought suppression, on the other hand, is less clear concerning its relationships with psychopathology mainly because of the different measures used to assess it. Several authors, including Wegner and Zanakos (1994) who developed the WBSI scale used to measure thought suppression in this study, have reported positive correlations between depressive and anxious affect, obsessional thinking and emotional vulnerability (Muris et al, 1996). Results of the present study failed to reveal any correlations between thought suppression (WBSI) and the measures of trait anxiety (STAI-T) and defensiveness (MCSD). The WBSI was only found to be positively and moderately correlated with dissociation (DES).

A finding that would seem to be in accordance with the literature is the comparatively high number of positive events recalled for element No 8 among the repressor group but this effect was shown to be rather a function of low anxiety since it was found to be even more pronounced within the low anxiety group. In that respect the proposed prediction by Myers and Brewin (1995) that repressors would recall the least number of negative experiences was not supported showing thus that defensiveness, high levels of which is a characteristic of repression, not only does not add to this effect but rather seems to reduce it (cf. the low anxious and repressor scores in Table 4.13).

The literature on repression has also provided some mixed evidence which could partly be explained by the fact that repressors tend to respond differently when they are tested by direct and indirect measures (Creswell & Myers, 2002). On the one hand, repressors are reported to have more self-esteem and exhibit comparatively more optimism than non-repressors (Myers & Reynolds, 2000). Also, it was found that the “high comparative optimism correlated with a low number of negative childhood memories recalled” by repressors (Myers & Derakshan, 2004). On the other hand, researchers using indirect measures report that repressors may have a similar underlying attributional style to depressed individuals (Creswell & Mayers, 2002), that repression and psychopathology are related (Dana & Christiansen, 1959), and that repressors experience more stress, which increases the more unaware they are about their use of the defence (Heilbrun & Chefitz, 1984).

The repertory grid measures reported in this study are regarded as indirect measures (Winter, 1992), which allow for a more unadulterated view of the subject matter to be taken. According to the findings of the present study repressors appear to share along with the low anxious group the comparatively extreme ratings of the SE, which was also found to characterise the PTSD group. In addition, it was found that among repressors there was a significant positive correlation between the “time since stress” (TSS) and “stress” measures. This correlation seems to suggest that in repressors the elapse of time not only does not seem to reduce the subjective sense of stress experienced during the event but rather it seems to increase it with possible adverse psychological effects for the individual. It was also found that a significant positive correlation existed between trait anxiety and the mean extremity measure in the same group. This last finding suggests that extremity

among repressors should be interpreted as an indication of psychological distress and not so much as a sign of meaningfulness ascribed to the event (e.g. O'Donovan, 1965). The author has, however, argued elsewhere (see the Discussion in the PTSD study, Chapter Two) that the concepts of meaningfulness and psychological distress are not necessarily incompatible.

The finding reported by Myers, Brewin, and Winter (1999) that repressors appear to be tight construers was not supported in the present study. Tight construing has been seen as a constriction tactic whereby anxiety-provoking material can be excluded from consciousness (Catina, Gitzinger, & Hoeckh, 1992). In that respect tight construing appears as a defence mechanism similar to denial (Slater, 1977) but it has to be mentioned that it also appears as an indication of pathological levels of anxiety as was found to be the case among the PTSD patients (see Chapter Two). Taking the latter into account the finding that repressors did not differ from any other of the groups on this measure must be seen as a rather positive attribute.

Finally, the prediction made within the systems theory's framework (Schwartz, 1990) that repressors would be using a dichotomous or categorical (yes or no) style of thinking was also not supported by the current data. As mentioned already in the introduction, the specific theory does not see repression as a uniform response and the fact that it discriminates between different levels of repression might account for contradictory findings.

4.4.1 Attempting an interpretation: epistemic control and preparedness as prophylaxis.

The central question arising from the above discussion is why an otherwise normal group of students, characterised by low trait anxiety, exhibit patterns of construing that bear similarities to patterns found among PTSD patients. As already mentioned, this finding seems counterintuitive since it goes against common expectation which would predict that highly anxious individuals are more likely to have "thought patterns" resembling those people afflicted by an anxiety disorder such as PTSD.

In order to account for this unexpected finding the present thesis takes as its starting point Kelly's (1955) fundamental postulate: "a person's processes are psychologically channellized by the ways in which he anticipates events" (Vol. 1, p.46). It is obvious that the concepts of anticipation and prediction are central within the framework of personal construct theory and Kelly related them both directly to the notion of anxiety as he described it as something people experience whenever they are faced with events which they find difficult to interpret or predict. As Kelly further elaborated, "anxiety means that we cannot predict the outcome of our actions nor the action of others" (Fransella & Dalton, 1990, p. 36).

Implicit in this account of anxiety is the notion of control and a number of authors have pointed to their close relationship (e.g. Barlow, 2002; Foa, Zinbarg & Olasov-Rothbaum, 1992). The future oriented thinking that is characteristic of anxiety states is often an attempt by the individual to exert some kind of control over the perceived threat. Within the literature a distinction has been made (e.g. Rothbaum, Weisz, & Snyder, 1982) between two types of perceived control which here will be referred to as pragmatic and epistemic control following Miceli and Castelfranchi (2005). Pragmatic control refers to the notion of power over events whereas epistemic control refers to the individual's ability to foresee what will happen.

In that sense Kelly's centrality of anticipation is more closely linked to the epistemic notion of control since it emphasises predictability and the mental effort of the person to construe versions of reality that would bear close proximity to his/her expectations. Traditionally, however, pragmatic control has been seen as more important (e.g. Heckhausen & Schulz, 1995) and epistemic control as secondary. Here, epistemic control will be regarded as functionally instrumental to the pragmatic one but also as autonomous "to the point that some conflict may arise between the two" (Miceli & Castelfranchi, 2005, p. 292). This thesis will use the concept of epistemic control as its main explanatory device for two reasons, first, because epistemic control puts more emphasis on prediction which is central to the notion of anxiety and second, because it introduces a more constructivist notion of human thinking which is in accordance with the present thesis' theoretical orientation.

What seems to typify highly anxious but otherwise normal individuals, similar to the subjects of this study, is their unremitting anticipation of negative possibilities that permits them to avoid potentially negative surprises, outcomes, and disappointments. In that respect prediction of negative possibilities and epistemic control could be seen as adaptive mechanisms whereby the individual increases preparedness for facing challenges and evading potential harm. This view of anxiety is basically that of a normal and functional feeling and this is the notion of anxiety that will be used as the basis for explaining the results of the present study.

If we accept that elevated but normal levels of anxiety can increase epistemic control, and thus preparedness, we could well see why the low anxious subjects (including the repressor group) in this study could potentially perceive a highly stressful event as something less expected and potentially more threatening than the high anxious individuals. The potential danger that such a reaction coming from an encounter with a stressful event might pose to a low anxious individual could not be estimated based on the present data. In that respect, the question of whether or not a low anxious predisposition might function as a risk factor for developing enduring post-traumatic symptoms after a traumatic encounter is difficult to answer. The distinction proposed earlier by the author between process and content of construing can help us to see some of the complexities involved. It might well be that the contribution of content (excessively negative appraisals of the event) is far more important in the development of maladaptive patterns of construing than any feature relating to process such as elaboration.

As has already been discussed in the PTSD study (Chapter Two) psychological maladaptiveness starts emerging as soon as a sense of threat has been established as a result of a protracted period of experiencing extreme anxiety. In the same vein Miceli and Castelfranchi (2005) observe that “anxiety becomes ‘abnormal’ if one finds oneself trapped in a way of thinking which constantly revolves around the notion of threat (p. 313). Although the stressful event was found to be over-elaborated within the low anxious group, indices of threat, such as a comparatively large first principal component, were absent. In that respect comparisons of construing patterns between psychologically “normal” and “abnormal” groups could give us an idea about what are not only the sufficient but also the necessary features of psychological maladaptiveness.

Chapter Five: Asylum Seeker and Refugee Study.

5.1. Introduction

Researchers from a wide range of theoretical backgrounds have come to problematise the diagnostic category of post-traumatic stress disorder (PTSD) by questioning its objective status (Becker, 1995; Bracken, Giller, & Summerfield, 1995; Marsella et al, 1996; Summerfield, 2001; Young 2000). According to these views the nosological entities of psychiatry are not discovered but rather they are culturally constructed inventions and on that ground PTSD has been criticised for its implicit ethnocentric assumptions. Specifically, the PTSD diagnosis is thought to carry all the assumptions of Western individuality, which sees the person as an isolated entity, conceives their problems in psychological terms, and ignores their surrounding socio-cultural context.

Seeing concepts such as “memory”, “subjectivity”, “trauma”, etc. not as subjective entities possessing any kind of essential nature but rather as existing in the public domain and being discursively constructed helps us explain their changes in time as well as their cultural differentiations. Supporting this thesis is the realisation that the definition of trauma has already seen some changes within the Diagnostic and Statistical Manual of Mental Disorders (DSM: American Psychiatric Association) by gradually moving beyond the stressor that “would provoke symptoms of distress in almost everyone” (in DSM-III: APA, 1980) to progressively incorporating the subjective appraisal of the individual experiencing the trauma and by widening the definition of traumatic situations (in DSM-IV: APA, 1994). Also, the fact that people from non-Western cultures usually seem to report a different set of symptoms following traumatisation, with somatisation and dissociation more commonly reported among them (Marsella et al, 1996), is again supporting the above argument.

A fertile ground for testing such assumptions is the currently expanding area of research concerning traumatisation in asylum seeker and refugee populations arriving from all over the world to western European countries, Australia, and the United States of America. From the beginning of the 1990s there has been an exceptionally high number of people fleeing their countries, as a result of conflict, creating a refugee flow unparalleled since World War II (United Nations High Commissioner for Refugees, 2005, see Diallo &

Abou Chabake, 2007). By definition, asylum seekers and refugees differ only in terms of their legal status, with the latter already having been granted asylum and the former still waiting for a decision on their application for asylum. Forced displacement, torture and other forms of mistreatment usually leave severe and lasting psychological effects on these populations, as has been extensively documented (e.g. Garcia-Peltoniemi, 1991; Weisaeth & Eitinger, 1993).

However, PTSD does not seem to be the only reaction to trauma experienced by displaced populations (Silove, 2004), and, as Horowitz, Weiss, and Marmar (1997) point out, we should be cautious about focusing exclusively on PTSD as the outcome of trauma. Concerns have also been raised about the inability of the PTSD category to fully capture the complex psychological responses to gross human rights abuses often experienced by such populations (Silove & Franz, 1999). In addition, a number of authors have mentioned aspects of traumatic experiences suffered by non-European people that are not present in the current definition of PTSD (Marsella et al, 1996). This research has proposed more extended accounts of PTSD, such as the category of “complex PTSD”, but at the same time seems to support the validity of its current DSM definition by pointing out that it contains both universal as well as culture-bound characteristics.

Moreover, when the category of PTSD is applied to refugee and asylum seeker populations further challenges accrue regarding its applicability to trauma research. By definition, post-traumatic stress disorder assigns the trauma to the past implying, in the case of refugees, that the traumatic experience took place before or during the flight. Current research, however, stresses that “much of the trauma that refugees experience is in their country of resettlement, through isolation, hostility, violence, and racism” (Burnett & Peel, 2001b, p.608). This phenomenon has been referred to in the literature as re-traumatization and is thought to arise “directly out of shifts in domestic policy towards asylum seekers, changes which have their roots in local, regional and international political agendas” (Silove, McIntoch, & Becker, 1993, p.606).

Differences in social policy towards asylum seekers and refugees in each country, as well as the realization that these people do not form a homogenous group, necessitates that the specific social and historical context is taken into account in each investigation. In Britain the number of refugees seeking asylum has increased dramatically as in most

Western European countries. Specifically in London, where the participants of this study derive from, the number of asylum seekers has almost reached three hundred thousand people. It has been estimated that an overwhelming two thirds of this population has experienced anxiety and depression severe enough to disrupt their daily lives (Burnett and Peel, 2001a). Medical reports have found that one in six refugees in the United Kingdom “has a physical health problem severe enough to affect their life” (Ibid, p.544).

Global events such as economic immigration on a substantial scale and international terrorism, as well as domestic issues mean that most of the recipient countries have become progressively more unsympathetic towards this population since quite often bona fide asylum seekers get confused with illegal economic immigrants or even terrorists. In Britain, specifically, “recent hostile media headlines and comments from politicians... have not nurtured good relationships, and there has been an increase in negative feelings towards refugees and consequent racist attacks on them” (Ibid, p.545). As Fernando (2005) observes, the society in Britain today “has been conditioned to think of refugees and asylum seekers as being different in some fundamental way to British ethnic minorities” (p.183), meaning that the former are treated worse than the latter. Incidentally, a participant/interviewee in this study expressed the view that British people tend not to differentiate between the two groups, but rather, they have started perceiving both groups in the same negative manner. Fernando (2005) further remarks that refugees and asylum seekers “are all often viewed with suspicion and even hostility by many in Britain, mainly because of xenophobia-an antipathy to foreigners in general-and racism (antipathy based on skin colour)” (p. 184).

Taking into account the adverse social conditions that asylum seekers often encounter in the country of their reception, the concept of re-traumatisation, mentioned earlier, emerges as central to their condition. Hauff and Vaglum (1995) have pointed out that both the traumatisation in the home as well as host country should be taken into account. From studies conducted in London, with Iraqi asylum seekers, it seems that post-migratory factors, such as poor social support, were more closely related to depression than history of torture (Gorst-Unsworth & Goldenberg, 1998). It was also estimated that regarding attitudinal change (the existential dilemma), in the same group, “the extent of

change correlated not with severity of trauma but with various social factors such as isolation, racial attacks, and dissatisfaction with housing” (Ibid, p. 93).

Outside the United Kingdom the same picture emerges regarding the effects of post-migratory factors on the psychological well-being of asylum seekers. It was found, for example, that although many of the traumatic events experienced by Vietnamese asylum seekers in their own country were central to their psychological disorder at the time of their arrival in Norway, they ceased to show any correlation after three years (Fernando, 2005). The significance of post-migratory factors seems to increase in traumatised refugees over time (Carlsson et al, 2006) and also, as the Canadian task force concluded, the asylum seekers were facing more problems after their arrival in Canada than before coming to the country (Iversen & Morken, 2004).

One of the biggest problems reported in the literature as facing asylum seekers, which was also evident in the present study, is the waiting that usually accompanies the decision on their asylum application. This waiting also relates to uncertainty about the future and the inability to provide for themselves that leads to passivity, lack of purpose in their daily lives and often total dependence on welfare. As far as social relations are concerned, chronic separation from family members, especially from spouse or children, has been reported to correlate closer with self-distress than with severity of psychiatric disorder (Hauff & Vaglum, 1995). In accordance with these findings is the report by Summerfield (1999) pointing out that typically the majority of refugees, when asked about what would improve their situation, are more likely to indicate social and economic factors rather than psychological help.

Attempts have been made to differentiate between predicting factors of mental health and wellbeing in asylum seekers and refugees. A classification proposed by Carlsson et al (2006, p.51) mentions three along with a possible fourth factor: a) background factors (e.g. level of education, sex, etc); b) pre-migratory factors (e.g. past trauma); c) post-migratory factors along with a “peri-migratory” phase, which mainly refers to the asylum application period during which issues such as fear of repatriation and not having a work permit are some of the major problems facing asylum seekers. The authors conclude that “vulnerability to the post-migratory factors may partly be mediated by past trauma” (Ibid, p.56). A meta-analytic study on predictors of mental health problems in

refugee populations has shown that the majority, three quarters of them, were post-migratory including: pre-migration trauma, social isolation, low education, and unemployment (Ekblad, Belkic, & Eriksson, 1996).

Specifically, relations have been found between some of the predicting factors described above and certain diagnostic categories. Depression has been found to be influenced mainly by post-migratory factors and particularly unemployment (Carlsson et al, 2006) and poor social support, with the latter being “a much stronger predictor of depression in the long term than severity of trauma” (Gorst-Unsworth & Goldenberg, 1998, p. 93). Anxiety and PTSD have been found to relate mainly to peri-migratory factors such as delays in processing of asylum applications (Silove et al, 1997). Lack of affective support, a post-migratory factor again, was found to predict both PTSD and depression in a sample of male Iraqi refugees in London (Gorst-Unsworth & Goldenberg, 1998). Factors that seem to prevent recovery from PTSD in asylum seekers and refugees have been found to be social and economic adversity, fear of repatriation, age, and proficiency in the language of the host country. Some prophylactic effect, among post-migratory factors, seems to be provided by social relations and knowledge of the new language in traumatised refugees (Hauff & Vaglum, 1995).

Differences in psychiatric morbidity between asylum seekers and refugees have also been found, suggesting, once more, that post-migratory factors might also be at play here. Iversen and Morken (2004) reported that “the diagnosis of schizophrenia was more prevalent in the refugee group, among both females and males, compared with the asylum seeker group” (p. 468). The first reports of higher incidence of schizophrenia among refugee populations came out of Britain in the 1960s and specifically concerned migrants from the English speaking Caribbean islands. Studies during the 1980s started reporting even greater rates of the disorder in the second generation of the same group of immigrants. More recent studies have confirmed the same high rates of psychosis within a wide range of migrant populations in Britain “implicating migration itself as a risk factor for psychosis (Hutchinson & Haasen, 2004). The same picture seems to emerge from other Western European countries like Holland, Germany, Sweden, Denmark and Belgium but, unlike those, there is no report of such differences between refugee populations and native people in Australia and the United States. A possible explanation for such a difference is that the

basically migrant nature of the latter countries might be able to ameliorate potential hazards in the process of adjustment in the new culture.

Another difference found between asylum seekers and refugees was the higher prevalence of PTSD in the former group among both males and females (Iversen & Morken, 2004). The forced nature of migration and the uncertain future that asylum seekers usually experience have been proposed as possible reasons for the difference. Silove et al (1998) seem to implicate post-migration factors relating specifically to the asylum seeking process as the main reason for the difference, suggesting in this way that “asylum seekers were not indiscriminately over-reporting their symptoms or living difficulties (p. 180).

Recently conducted epidemiological studies, however, have shown low rates of PTSD in refugee populations as, for instance, the 15% rate reported by Mollica et al (1993) in Cambodian residents in a refugee camp. Gorst-Unsworth and Goldenberg (1998) have also found low rates of PTSD (10.7%) in a sample of Iraqi refugees in the UK, which was an unexpected finding given the degree of torture and systematic persecution that these people had suffered. Different explanations have been put forward to explain these inconsistencies in the literature. Silove and Franz (1999) supported the recent findings by pointing to advances in epidemiological approaches and sampling methods, whereas others have emphasised the political aspects of research and the use of statistics based on questionable scientific evidence in order to promote certain professional interests (Stubbs, 1999, cited in Watters, 2001).

This political facet of trauma research has implications not only for professional communities but also for the social policy of recipient countries regarding the management and treatment of asylum seekers and refugees. It has been suggested that the adoption of the bio-medical model of trauma allows more easily for resources to get mobilised and for claims of asylum to be granted support more readily, something that a socially oriented model which would emphasise the circumstances in the recipient countries might fail to achieve (Watters, 1999).

Potential problems that a medical approach to trauma, through the diagnosis of PTSD, might present are the pathologising of human distress and suffering and the turning away from contextual issues of culture, politics, and society. As Burnett & Peel (2001b)

suggest, “symptoms need to be understood in the context in which they occur and through the meaning they represent to the individual experiencing them: distress and suffering are not in themselves pathological conditions” (p.608). Recognizing the need to explore personal meaning and the wider context in which traumatisation takes place, the present study sought to investigate personal accounts of trauma and hardship in refugees and asylum seekers. Taking into account that re-traumatisation does occur for a number of these people, after their arrival in the host country, this study adopted a diachronic perspective that tried to elicit personal stories extending from the time the participants lived in their home country to the present. An issue of particular interest explored in this study was whether the asylum process was construed in the same way as the previous traumatic experiences.

An effort was made to explore trauma events in the context of their psychosocial meaning through the analysis of emerging themes from the participants’ narratives and elicited personal constructs and events. Seen within the “post modern ethic”, as described by Bracken et al (1997), this study had “a concern not to impose order on the world but instead to allow the emergence of other voices and visions, even if this involves increasing complexity and ambivalence” (p.435).

Following Hauff and Vaglum’s (1995) recommendation for a need for trauma studies that will “combine different perspectives and research traditions” (p.360), the current study sought to bring together data deriving from semi-structured interviews and repertory grids along with the theoretical traditions of phenomenology and constructivism, with the purpose of enhancing interpretability.

5.2. METHOD

Design

A cross-sectional, within group design, was used to investigate the personal experiences of five refugees and asylum seekers. All participants were individually interviewed using an in-depth semi-structured interview schedule (see Appendix C). All five participants also completed the following measures*:

a) A 15 x 15 Repertory Grid (LERG, see Study1 for a full description of its use and properties).

b) The following five questionnaires (also used and described in detail in the PTSD study, Chapter Two): i) Beck Anxiety Inventory (BAI: Beck 1990); ii) Beck Depression Inventory (BDI-II :Beck, Steer & Brown, 1996); iii) General Health Questionnaire (GHQ: Goldberg & Hillier, 1979); iv) PTSD Symptom Scale (PSS: Foa, Riggs, Dancu, & Rothbaum, 1993); v) The Impact of Events Scale (IES: Horowitz, Wilner & Alvarez, 1979).

(*Due to the severity of his symptoms, participant P5 was unable to complete the rating for his Repertory Grid as well as the BDI-II and IES questionnaires.

The interview schedule

Informed by literature on asylum seekers' experience of re-traumatisation after their arrival in the host country (e.g Silove et al, 1993), the questions of the interview schedule (see Appendix C) proceeded diachronically through an examination of the participants' experiences in their home countries, during their flight to Britain and up until the present time. An emphasis was placed upon exploring traumatic and unsafe situations which participants had experienced during this time. The questions also tried to capture the role and contribution of a number of supportive agencies in Britain, such as the Health and Social Services, professional organisations etc, to the well-being of participants, attempting in this way to keep a balanced view of positive and negative influences on participants' lives. The role of the psychotherapeutic treatment participants had received in Britain was also assessed.

Data collection

The interviews were carried out by the author using interpreters in all but one interview in which participant P3, although English was not his first language, was proficient enough in English in order to be interviewed unassisted. The author's first language was also not English. The semi-structured interview schedule (see Appendix C) was used to discuss different aspects of participants' lives. All interviews were audio-taped and transcribed verbatim. The length of the interviews ranged between 40 and 90 minutes. After the interview, participants were invited to take part in a psychological assessment consisting of the measures described in the design section above. The assessment took place a week after the interview in either one or two sessions, with the second one being one week later. On average, the assessment took three hours to complete, without the assistance of an interpreter, and between four and six hours when an interpreter was required. Ethical approval was obtained from a local NHS ethics committee. The participants gave written consent for taking part in the psychological assessment and for the research interviews to be audio-taped. There was one case of a potential participant who refused to have his interview audio-taped and as a result he was excluded from the study.

Reliability, validity, and generalizability

The following criteria were used to ensure credibility, rigour, reliability and validity during the process of analysis and reporting of the interview data: i) extensive verbatim quotations were provided in the report to assist transparency in the analytical process (Stiles, 1993), to demonstrate that the themes are grounded in the data, as well as to allow the reader to create alternative readings or understandings (Elliott, Ficher, & Rennie, 1999); ii) to ensure retest reliability, a detailed step-by-step description of the analysis process is given below in the data analysis section; iii) wherever identified, disparities within themes were stated (Mays & Pope, 1995); iv) data, methodological and theoretical triangulation (Banister et al, 1994) were used combining interview and repertory grid data to enhance

interpretability. Data and methodological triangulation will allow possible limitations of the two methods, namely repertory grid and interview, to be kept to a minimum by making available different types and sources of information, making sure in that way that the data are not just the product of the method. Theoretical triangulation is meant to promote connections between different theoretical orientations, such as social constructionism, narrative psychology and personal construct theory. Although connections between these theories have already started emerging in the literature (Mancuso, 1996) there is, however, an absence of concrete methodological tools that will allow the use of different forms of analysis, developed within these theories, to be used within the context of other theories or with a different set of data.

Data analysis

Part One: Analysis of interview transcripts

The qualitative method of Interpretative Phenomenological Analysis (IPA; Smith, 1995) was used to analyse the interview data. Briefly, the analysis was conducted following the specific guidelines of IPA outlined by Smith, Jarman, and Osborn, (1999) in the following stages:

a. Each individual transcript was read and re-read closely in order to familiarise the researcher with the material and to create insights.

b. Since the interview questions tapped into different issues in the participants' lives it was decided for the interview schedule (see Appendix C) to be divided into different units in order to facilitate the analysis. The following set of questions were identified as forming individual units: 1) The first unit of analysis (questions 1-5) dealt with the issue of unsafe and traumatic situations experienced by the participants from the time they were living in their home countries up until the present time. 2) The second unit (questions 6 and 7) explored possible sources of feelings of anxiety and depression as experienced at present by the participants. 3) The third unit (questions 8 and 9) sought to explore participants' experiences of their contacts with Health and Social Services as well as other

professional organizations in Britain. 4) Finally, the fourth unit (question 10) explored the participants' experiences of psychotherapeutic treatment they had received in Britain.

c. The researcher then went through each individual transcript and made comments within each one of the aforementioned four units of analysis. The comments were kept separate in the left margin and included mainly summaries of what was said, questions, and preliminary interpretations. If and when themes were thought to be emerging from the comments these were written on the right margin.

d. Connections were then made between themes deriving from different participants and belonging within the same units of analysis in order to identify clusters of themes.

e. Major themes then emerged that seemed to capture most comprehensibly the participant's experiences with sub-themes, at times, attached to them.

f. A table for each individual transcript including the themes and sub-themes for each unit of analysis was created. Comparisons between individual tables were then conducted in order to identify master themes for each unit. At this point selection was necessary which was based not only on the prevalence of the themes within data but also on "the richness of the particular passages which highlight the themes, and how the theme helps illuminate other aspects of the account" (Smith et al, 1999, p.225). To achieve this, notes were made in a reflective diary in order to identify how individual themes could potentially fit within a coherent structure.

Part Two: Analysis of Repertory Grids.

Information extracted from the Repertory Grids was based on an analysis performed via the GRISTAT (Bell, 1998) and Idiogrid (Grice, 2004) software programmes.

Participants

Five participants aged between 28 and 52 were recruited, on a voluntary basis, from the North London area (U.K); three of them were recruited from a refugee service centre and two from a mental health NHS trust. All of them had received the diagnosis of post-traumatic stress disorder from a consultant psychiatrist and had been referred for

psychological treatment. At the time the present study took place four of the participants had refugee status and one was an asylum seeker.

Purposive sampling was employed (e.g. Robson, 1993), which sought to obtain data from adult refugees and asylum seekers who had received a diagnosis of post-traumatic stress disorder. Labels were allocated for each participant (P1, P2, etc) to protect anonymity, specific details have been altered to protect confidentiality, and where quotations are used from the interviews identities have been concealed (see Table 5.1). Participants are comparatively presented in Figure 5.1 based on their questionnaire scores .

Table 5.1: Participants' demographic details

Label	P1 (female)	P2 (male)	P3 (male)	P4 (male)	P5 (male)
Age	28	39	35	40	52
Country of origin	Turkey	Sri Lanka	Kosovo	Georgia	Iran
Years in U.K	2	3	6	1	4
Status	Refugee	Asylum-seeker	Refugee	Refugee	Refugee
Type of trauma	Lost her husband	Tortured by the army	Tortured by the police	Tortured by the police	Tortured by the army
Current situation	Lives with her ill mother	Lives on his own at a friend's house	Lives with his wife	Lives on his own	Lives with some members of his family

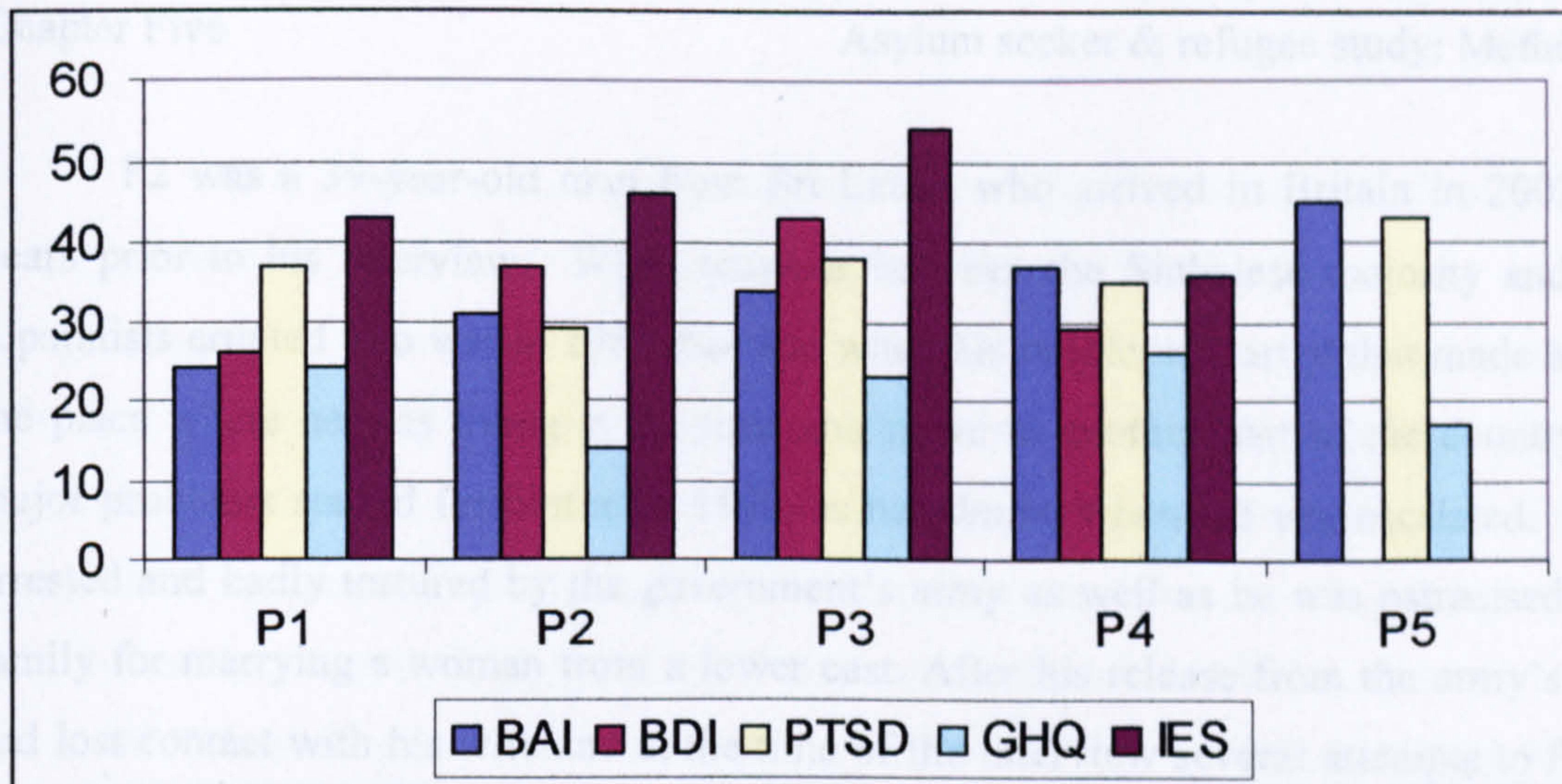


Figure 5.1: Participants' questionnaire scores (participant P5 completed three out of five questionnaires).

The following is a more detailed description of some of the participants' personal histories which tries to provide a socio-historical context to their accounts as presented later on in the analysis of their interviews.

P1 was a 28-year-old Kurdish woman from Turkey who arrived in Britain in 2004, two years prior to her interview. She got engaged and later married to a Kurdish political activist in Turkey. Her husband was arrested several times and tortured by the police. At the same time she was also under surveillance and got arrested and sexually harassed by the police. The police also threatened to kill her and her husband during interrogation. At some point, after his release from prison, her husband decided to flee the area fearing further torture and imprisonment and since then she never heard from him and at the moment she does not know where he is and if he is alive. She eventually decided to flee Turkey for fear of further prosecution since as she said "I was still carrying his surname (her husband's) and if I didn't run away the same things (persecution) would carry on again and again". At the time of the interview she had already been granted with asylum and thus she had refugee status.

P1.1 (translator) was a middle-aged Turkish woman who translated from Turkish to English

P2 was a 39-year-old man from Sri Lanka who arrived in Britain in 2002, three years prior to his interview. When tensions between the Sinhalese majority and Tamil separatists erupted into war in 1983 that was when his problems started that made him flee the place where he was living at the time and move to another part of the country. The major problems started for him after 1990, as he admits, when the war escalated. He got arrested and badly tortured by the government's army as well as he was ostracised by his family for marrying a woman from a lower cast. After his release from the army's jail he had lost contact with his wife and at the time of the interview several attempts to find her through the Red Cross had failed. At the time of the interview his asylum application had been rejected and he was making an appeal. His status thus was that of an asylum seeker.

P2.1 (translator) was a middle-aged Indian man who translated from Tamil to English.

P3 was a 35-year-old man from Kosovo who arrived in Britain in 1999, six years prior to his interview. As a student he participated in demonstrations in Kosovo against the Serbian government and he got arrested and beaten up by the police. He has been in a relation for the last ten years with a woman from Kosovo with whom he has a child together. He and his partner had recently granted asylum and so at the time of the interview his status was that of a refugee. The interview was conducted in English.

P4 was a 40-year-old Yezid man from Georgia (former state of the Soviet Union) who arrived in Britain in 2005, a year prior to the interview. Following the collapse of the Soviet Union and especially after 1995 the ethnic minority of Yezids was persecuted by the Georgian government and as a result the majority of them have fled the country. His farm was confiscated by the state and he was attacked and physically abused by the police and the local people. He had recently been granted asylum and so he had a refugee status at the time of the interview.

P4.1. (translator) was a middle-aged Lithuanian woman who translated from Russian to English.

P5 was a 52-year-old man from Iran who arrived in Britain in 2002, four years prior to his interview. During the Iranian revolution of 1978 he was imprisoned and tortured by the government's army. He fled from Iran with only part of his immediate family and currently has difficulty coping with this separation. He appeared to be the most symptomatic of all the interviewees, had great difficulty talking about his traumatic experiences, and became quite emotional and incomprehensible at times. At the time of the interview he had already been granted with asylum and thus he had refugee status.

P5.1. (translator) was a young Iranian woman who translated from Farsi to English.

Researcher characteristics

As a non-British research student of Greek nationality who has lived and worked in Britain for the last ten years, the author shared some common characteristics/experiences with the participants of this study. Not having English as a first language, the researcher shared with participants the struggle of learning the language and trying to communicate with the natives. Also common was the experience of living in the country and the whole process of trying to make sense of the native culture, although the process was seen and experienced from different points of view for each individual. The sharing of common experiences can be said to enhance empathy from both sides and to create a feeling of mutual understanding between participant and researcher. Sharing some common characteristics with the participants did not however abolish perceived differences that seemed to appear unexpectedly with, sometimes, disrupting effects. A good example, illustrating both empathy enhancing and disrupting influences during the research process, can be seen in participant P3 who had initially refused to be interviewed by the author as soon as he learnt about the latter's nationality which he perceived as hostile towards his country of origin. However, when P3 decided to take part in the study and be interviewed by the author he seemed, at times, to try to enhance empathy during the interview by positioning his native country and that of the researcher's within a common context as seen in the following extract: *"people could be desperate and could become suicide bombers*

and blow themselves up in London, my son might suffer, they might start building bombs in Kosovo now or in Greece”(P3).

Recognizing the interview process as jointly produced and co-constructed between participant and researcher (Lucius-Hoene & Deppermann, 2000), an interview journal was maintained during the study in order to enhance reflexivity and bracket personal ideas as they developed (Yardley, 2000). The author drew upon theoretical perspectives broadly deriving from constructivist and social constructionist orientations.

5.3. RESULTS

5.3.1. Interview analysis

What is unsafe and traumatic?

In keeping with the chronological arrangement of the questions in the interview schedule (see Appendix C), the first part of this analysis followed a similar mode in order to provide a narrative structure that will facilitate comparisons between themes that belong to different chronological periods. The following analysis is based on themes emerging from the first five questions of the interview covering the period from when the participants were living in their home countries up until the day of the interview. The questions seek to explore how the participants perceive the concepts of “unsafe” and “traumatic” and how these concepts relate to different stages in their lives. The main concern in this part was the exploration of the so-called initiating or causative factors of PTSD along with possible issues of re-traumatisation (Burnett & Peel, 2001a&b; Silove et al, 1993).

What is unsafe?

In the home country: Three issues seem to be central in producing feelings of what participants describe as unsafe in their country of origin: 1) persecution for belonging to an ethnic minority group; 2) collapse of the state; and 3) war. Often, these three issues appear to be intertwined and are difficult to separate since one can sometimes function as an antecedent for another and vice versa. The following themes were described by the participants as defining their sense of being or feeling unsafe:

a. Feeling unwanted/isolated.

This theme emerged mainly from descriptions of two types of situations, first, belonging to an ethnic minority group, and second, being in a socially unfavourable situation because some social norms were thought to have been violated. P1 is a case of the former when as a Kurdish girl living in Turkey she felt unwanted and at the same time

isolated from the rest of the children because of her ethnic background (*"When I was in primary school I felt isolated, when I was in primary school, because I was Kurdish I felt unwanted and I felt unsafe"*, P1). P2 is a case of the latter as he happened to marry a woman in Sri Lanka who belonged to a lower caste (*"...there I met a girl whom I liked so I got married to her but...she was from a lower caste and so I was completely ostracized and treated very badly from all my family"*, P2).

b. Discrimination/Persecution.

This theme seems to permeate often implicitly the descriptions of all participants. They all seem to have had the experience of being discriminated against in one form or the other. P4 was discriminated against when all his fortune was confiscated by the government because he belonged to a certain ethnic minority group (*"I didn't have any safe house, didn't have any farm because it was confiscated by the state"*, P4). P3 decided to participate in demonstrations against the government's educational policy which he felt discriminated against his ethnic group (*"we wanted to pursue our system of education and the Serbs wanted to impose the Serbian system, so we didn't want that, so all the professors and the students were expelled from the university so we started to have demonstrations in front of the universities"*, P3). This theme could be seen as related to the previous one ("feeling unwanted/isolated"), with the only difference being that in the case of discrimination certain things seem to have taken place (e.g. confiscation of property, legal provisions, etc) that go beyond subjective feelings.

c. Unpredictability/Uncertainty.

This is a theme encountered throughout the participants' narratives. The inability to predict or anticipate the future seems to have become a "core" theme in the participants' lives with various psychological consequences. P3 describes it as one of the most psychologically damaging feelings that *"I have been experiencing all my life"*. P2 had been repeatedly referring to it as a defining feature of feeling unsafe in his home country (*"the situation was becoming very fearful because I didn't know what was going to happen"*, *"I didn't know what to do and where to go in the future"*, *"there were these airplanes that*

they went and suddenly dropped bombs and it was so uncertain, we didn't know when we heard an airplane or helicopter flying we thought that was the end").

d. Living under threat.

This feeling is usually more prominent in war situations as described by P5, for example, who experienced the Iran-Iraq war (*"because of the bombing and war in Iran"*, P5). P2, who also experienced war in his native Sri Lanka, described a situation where he was forced by an organization to provide them with money (*"...so they were putting extreme pressure on me and threatened me at the time"*, P2). In another occasion he had to live very close to an army base (*"the army had established base camps there and it was a frightening experience for me because I was so near to them"*, P2). Living under threat led P2 to even change his name in order not to be detectable by the army (*"Because of these frightening experiences I was using another name...so these people couldn't recognize me"*, P2). The sense of living under threat was also created in situations where there was a collapse of the state as in the case of the former Soviet Union and Yugoslavia. P3 describes the 1981 demonstrations in Kosovo *"when everything was starting to fall down in former Yugoslavia...I was almost suffocated from the tear gas"*. Also, P4 describes the situation in Georgia after it became independent from the Soviet Union and the effect that this had on him and his family (*"...after the Soviet Union collapsed I felt unsafe, I didn't have any safe house...I could not feel safe in this situation"*, P4)

During the journey: The hardships of travelling illegally could be seen as the main issue that encompasses all the relevant themes emerging from the participants' narratives. The following themes were identified:

a. Unpredictability/Uncertainty

Travelling illegally and in hiding entailed a certain degree of unpredictability and uncertainty which was usually accompanied by feelings of panic and fright. P1 came to Britain hiding in a lorry and as she described it, *"every time the lorry stopped I just panicked, as if something was going to happen now, what's going on, because I could not see anything"*. P3 talked about it as a defining feature of feeling unsafe during a dialogue

exchange, *“Unsafe, sorry unsafe, yes because you don’t know what is going to happen”*. P2 travelled initially in a boat, along with a group of people, under particularly harsh conditions, in a trip that lasted for forty-five days. After they reached land they all stayed at a flat for three months in an unknown country before he flew to Britain (*“...we didn’t know what the future was and what was going to happen”, “...I didn’t know where they were taking us or where we were coming from”, “...we didn’t know where we were and that was a frightening experience”, “We didn’t know where to go and what to do”, “I didn’t know if that was England or any other place, it was really frightening experience”*). P4 came to Britain hiding in a lorry and he described the main difficulty of travelling illegally as *“...the uncertainty and I felt very unsafe”*.

b. Having no choice/control.

The decision to leave the home country and travel abroad to an often unknown destination is presented as something which was forced upon the participants, something that they did not have a choice in deciding upon. P3 talks about the decision to flee his native Kosovo as something which *“was a necessity, I had to do that...”*. P1 describes the same sense of having no choice when describing the abuse and harassment she was regularly receiving from the police, *“if I didn’t run away the same things would carry on again and again”*. A sense of having no choice or control was also expressed by P2 in regard to choosing the means of transportation used to take him outside the country, *“I was promised to be taken out of the country by airplane but instead of an airplane they suddenly took me with forty two others in a boat”*. P5 became very emotional when he was relating the fact that he had no choice but leave his son back home when he fled his country along with his two daughters. At this point P5 started crying and addressed me with a question, *“(crying) How do you feel when someone has lost his son, I only travelled with my two daughters”* (P5).

Living in London: Asylum seekers and refugees in London face a number of issues which contribute, in their own specific ways, to the general sense of feeling or being unsafe. Some of these issues relate to social policy, which is common throughout Britain,

such as the asylum process. Other issues have to do more specifically with the life in London, such as housing and the local people. Still others concern the psychological and physical health of the participants and in some cases issues concerning their country of origin (e.g. threats aimed personally at them or to members of their families that might still live back in their home country). The following themes emerged from the analysis of the interview transcripts:

a. Reminders of the past.

One of the hallmark symptoms of post-traumatic stress disorder is re-experiencing of the initial trauma through intrusive thoughts or images when encountering reminders of the traumatic event. Old memories related to painful events might reappear, usually in the form of flashbacks, when traumatised people get exposed to an unsafe environment. Sometimes, through association, a perfectly safe environment can be transformed to something reminiscent of a dangerous or hazardous situation. This was the case for P4 when he almost passed out after an innocent episode, involving a child, at a bus stop (*"I had a strange experience recently, I was waiting for a bus and when I saw the bus I was going to get in and suddenly somebody hit me at the back of my head and I almost passed out, not because it was such a strong hit but because of, I don't know, I thought ok, I am in Georgia and somebody found me or caught me or whatever, I looked back and it was a child, a child behind me, you can imagine...all my fears came back and at the moment I felt I was back in Georgia"*, P4). P1 talked about how she feels every time she happens to see the police in the streets of London (*"Although I know that the police we've got here is not the same like the one we've got in Turkey, still every time I see them I feel bad about it, I feel unsafe, I remember the things I went through if I see a police here"*, P1). The same problem was also described by P5, who avoids to contact the police even when he needs to do so (*"I talked to the director of the centre here and he told me that I have to go to the police but I don't like going to the police because it makes me think all the bad things"*, P5). For P3 his past continues to haunt him as he explains (*"my family back in Kosovo was threatened...they have threatened my brother and also me if I go back or if they find where*

I am", P3). In such cases the threat is not just in the past but it extends to the present creating a permanent source of anxiety.

b. Uncertainty/unpredictability.

This same theme appeared also in both sections presented earlier, "the home country" and "during the journey". For some participants it represents an almost identical set of experiences throughout their lives as in the case of P3, who links the uncertainty and unpredictability with what he calls "the limbo" position which he has been experiencing since his days back in Kosovo ("*...not knowing what is going to happen, again the limbo, the limbo position, because I have lived all my life in this limbo position and I didn't want to go through that again here (in Britain)...*", P3). P2, who is still an asylum seeker, finds difficulty in coming to terms with the fact that each time he goes to sign up at the immigration office his future seems uncertain ("*At the time the dangerous situation confronting me is my status in the country, each time I go to sign at the immigration office because I don't have status to stay in the country I'm not sure if they are going to arrest me or ever come out of this 'signing condition'...*", P2).

c. Not having my own place.

This theme relates to the housing issue faced by a large number of asylum seekers and refugees in London. According to P1 her housing problem is at the heart of feeling unsafe in Britain ("*Because I don't have a permanent place, I don't have my own place, that's why I feel unsafe here in this country*", P1). P4 spent several months living in the streets:

- "*and then I went to Victoria station and lived there in the street*" (P4)

- "*For how long?*" (interviewer)

- "*About 3-4 months and about 2 months ago, before they gave me this room, I actually lived in a church. They allowed me to stay at night there but the church was closed during the day*" (P4)

Apart from feeling unsafe living in the streets of London, there was still another aspect to the housing issue that made P4 feel psychologically unwell. This other aspect relates to the long and usually stressful and frustrating experience of applying to the Council for finding a house to live in (*"I went to housing people because I am still waiting for a room and I had an appointment with them and they told me to come and I was waiting there for hours until the evening and then they told me to come tomorrow and the whole week was like that and after that I felt unwell, I felt really nervous, anxious, and I fell unconscious, I passed out in the Council office where I was waiting (translator: might be because of the epilepsy he is suffering from) and after that they gave me my appointment"*, P4)

What is traumatic?

In the home country: Abusive behaviour and torture perpetrated by the police and the government's army have been reported as the main sources of traumatic experiences. The distinction between the two agencies was made by participants P2 and P5, who implied that the government's army is a more brutal and, in a sense, less legitimate agency. P5 talked about the former aspect:

- "In 1978, which was the Iranian revolution, I was put in prison for two weeks and I was tortured" (P5)

- "By the police?" (interviewer)

- "No, by the government's special forces, they are the worst, uneducated and brutish"

Relating his arrest and later torture by the government's army in Sri Lanka, P2 gave an account of the latter aspect (*"When my father in law asked them (the army soldiers who arrested him) where they were taking me they said to the police station for questioning but they didn't take me to the police station, they took me to a camp"*, P2). The fact that the government's army seemed to act outside the boundaries of law may well have persuaded

the participants about the illegitimate character of their arrest and torture and this in turn may have had an effect on the severity of their psychological symptoms experienced later on. The following themes relating to traumatic experiences in the home country emerged from the participants' accounts:

a. Under surveillance.

A common police tactic to control people is to put them under surveillance. When the surveillance is conducted in such a manner that the person under it actually knows that he or she is being watched it can have some adverse psychological consequences as, for example, in the case of stalking.

P3 related that back in Kosovo *"I've been followed by the police"* (P3). Describing it in more detail, he recalls that the police *"used to follow me and other fellow students and the police used to call on my phone at home during the night, for example, at certain intervals, they didn't speak at all, like at 12 o'clock you have one phone call and then at 3 o'clock you have another one and then at 6 and you pick up the phone and then you hear nothing and it's very scary, so this kind of thing"* (P3).

P1 was also aware that she and her husband were being watched by the police (*"In the meantime I was feeling we were being watched by the police"*, P1). Even after her husband fled their hometown to escape further persecution by the police, P1 had to appear regularly at the local police station (*"After he run away (her husband) they asked me to go and give my signature every day (to the police)"*, P1).

b. Life threat

This seems to be the most common theme among participants and features prominently in criterion A, or else the 'doorkeeper criterion', of the PTSD diagnosis as described in DSM-IV (American Psychiatric Association, 1994): "The person experienced or witnessed or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others" (p.428). P1 describes how her life and that of her husband were threatened by the police while she was

kept in custody (*"They threatened to kill me, kill my husband, they said they will find him wherever he goes..."*, P1). P2's life was threatened when the boat he was sailing got shot by the navy (*"the navy shot my boat and hit the engine and because we were in danger we jumped into the water...that was a traumatic experience because they had the search lights focusing on the water and as soon as they saw any disturbance in the water they started shooting"*, P2). During the same incident P2 also *"...heard that one person on my boat got shot"*. After getting arrested by the army he endured a great deal of torture and interrogation (*"After this I was fearing for my life...so at this time I thought there was no hope and that the end was coming...I thought they would kill me or do something bad to me...so I thought that was the end and that I was taken to be killed or something"*, *"...one time they came in and tried to stab me with a bayonet and I tried to turn and it went through my leg"*, P2). P4 related how his life was threatened when he was attacked back in Georgia (*"The police and the local people attacked me and still have scars you can see it yourself (showing the top of his head), scars on the face"*, P4). P3 participated in demonstrations where he was beaten by the police (*"...the riot police came and they arrested some of us and I was beaten badly when they arrested us..."*, P3). P5's account of his life threatening episode and major traumatic experience was described in one brief sentence since every time he was thinking about it he became very symptomatic (*"In 1978 which was the Iranian revolution, I was put in prison for two weeks where I was tortured"*, P5)

c. Losing people.

Traumatic experiences were very often linked to unexpected or violent separation from people close to the participants. P1 lost her husband when he fled to avoid persecution from the police (*"When we came out (of prison) our parents came and then he decided to make a run and disappear and since I haven't seen him, I don't know if he is alive or not"*). While in captivity, P2 was told by the army that they had also arrested his wife as a way of breaking him during interrogation under torture (*"he told me they arrested my wife"*, P2). Although she was kept in the same camp but he never got to see her and he has not seen her ever since (*"My wife was kept in the same camp as me...they didn't show"*

me, my wife and I haven't seen her since", P2). The point at which P5 became very emotional and started crying during the interview was when he started talking about his separation from his son when he left his native Iran ("(crying) How do you feel when someone has lost his son... has it ever happened to you not to sleep all night and there is no morning coming?", P5).

During the journey: The themes related to feelings of being unsafe during the journey, mentioned earlier, appeared here again with the exception of the following theme, which seems to define more specifically the notion of a traumatic experience during the flight from the country of origin:

a. Getting caught and sent back/uncertainty.

P4 came to Britain hidden in a lorry and described the main difficulty he encountered during the journey as follows: *"It was very hard, I thought they would find me and send me back or put me in prison or arrest me, it was very difficult to move to England"* (P4). Later on he further emphasized his previous statement by adding that *"...I thought if they say no and decide to send me back I would just kill myself, I thought I am not going back, I will just kill myself"* (P4). P4 also mentions that it was actually the feeling of uncertainty that made him feel the way he did (*It was very difficult to move to England, it was the uncertainty"*, P4). P2 spent more than a month in the sea travelling on a boat before he arrived in England and, like P4, he also emphasized the issue of uncertainty (*"we were without water, food was very scarce and later on it was the uncertainty and we couldn't find anyone to tell us what was happening"*, P2).

Living in London: The main issues described by the participants regarding life in London were to do with the asylum process, some groups of local people, the media and contacts with certain organizations. From these general issues the following themes emerged:

a. The limbo

According to P3 the *“limbo position, P3”* summarizes, in a sense, his entire experience of living in London since his arrival six years ago (*“This limbo position...me and my wife went like 10 times in court and it was very, very traumatic”*, P3). P3 also emphasized that living in limbo is not new to him and that he has lived in that same position back in his home country (*“...again the limbo, the limbo position, because I have lived all my life in this limbo position and I didn't want to go through that again here (in London)”*, P3). Central to his definition seems to be the concept of time (*“limbo is the time, it was quite a long time, it took 6 years to have the final decision from the court and I had to go 10 times to the court (for his asylum), P3”*). P5 also stresses the time it took to obtain his asylum (*“About one and a half years and it was quite a traumatic time, P5”*). Closely related to the notion of time is that of waiting (*Six years, six and a half, waiting has affected my life hugely...again the limbo, the limbo position, P3*). Waiting seems to have put P3's life on hold (*“...just waiting and waiting and waiting, not being able, not being free to work, to study properly, to think properly...”, P3*). At another instance P3 uses the metaphor of “Purgatory” to talk about the effects that waiting had on him (*...now we have finished with the Home Office, with the Immigration section, we have to do nothing with that but that stage was like “Purgatory” for me, it was too long*). P2 expresses the same general feeling when he talks about his asylum application with the added notion of being under surveillance too (*“at the moment it's in a stalemate situation of me having to go and sign monthly for just to remain from month to month in the country and this has been going on for a long time”, P2*).

The other major aspect of the limbo experience is the sense of uncertainty it creates for the participants and also the inability to predict or plan for the future. This aspect relates again to the asylum process and is particularly important for P2, who was an asylum seeker at the time of the interview (*...uncertainty, because my application has been rejected to stay in the country and at the moment I feel very uncertain...”, P2*). The effects of waiting and the uncertainty about the future are both exemplified in the following dialogue exchange with P3:

- *“When you say suffering, what do you mean, what kind of suffering? (Interviewer)*

-*“Psychological suffering, because you wait and you don’t know what is going to happen, we could have been deported at any time...” (P3)*

b. Xenophobia/sense of discrimination.

This theme is mainly exemplified in participants’ narratives through the telling of specific events or stories usually embedded within a dramatic plot. P3 talks about xenophobia mentioning a dialogue that took place between him and a British born Asian man. P3 defined xenophobia as an attitude that concerns not only the asylum seeker and refugee population of Britain but also British born non-white people (*“a xenophobic way of dealing with foreigners, so because of that is not only me, refugees and asylum seekers who have suffered and are still suffering but all the foreigners, I have met for example Asian people who have been born in Britain and he said to me that people think he is an asylum seeker”*, P3). Adding to this confusion, quite often “bona fide asylum seekers fleeing persecution may be confused with unauthorised economic immigrants” (Silove et al, 1997, p. 355)

Recent global events, such as terrorist attacks and the “war on terror, seem to have added another dimension to this xenophobic attitude which further identifies the asylum seeker and refugee population, especially those of middle eastern origin, with terrorists. P5, who is Iranian, was once mistakenly taken as a terrorist with devastating effects on him (*“The hardest part was when I was living in an area of London, the next door neighbour was a terrorist...I was standing at the window waiting for my daughter and then a couple of journalists took lots of pictures of me, it hurt me a lot, I had a phone call from my mum in Iran and she was telling me that I am a terrorist, why did they take a picture of you and we can see you on TV, your pictures”*, P5). At another instance a group of teenagers were verbally abusing P5 while he was walking in the street with a friend (*“Teenagers, they say bad words to us and because I don’t know enough English a couple of weeks ago I was with a friend of mine and they started talking to us but because I don’t know English I didn’t know what they were talking about and the friend of mine told me that they were saying bad words, swear words to me. A twelve year old boy threw a can of drink towards me and I didn’t know what to do (P5 seemed to become very upset at this moment)”*, P5).

At another instance P5 relates: *“Because we are strangers in this country we go through some difficulties from people who sometimes throw things at our door. One day they threw some wooden sticks, I was in my yard and they just hit me on my head, I was in a lot of pain and I couldn't leave my place for one week because I was quite afraid.”*, P5).

All these experiences however do not seem to be perceived by the participants as reflecting the whole of the British society or population. P5, for example, talks, at another point, about how much he likes British people (*“They are helpful, they are very helpful, I am in love with the English people because they are very helpful and very kind”*, P5). P3 seems also to differentiate between the white British population and British born Asian and Black people. He regards those who seem to discriminate against him as being the latter group and explains it in the following way: *“because I think Black people and Asian they have suffered in England from racism so when they deal with a White person who is from eastern Europe or Southern Europe they try to show themselves as superior, that's how I look at it and it happened to me many times”*, P3). P3 mentioned more than once, during his interview, the following event that for him exemplifies the discriminatory attitude encountered by non-White British people: *“recently for example I called on the phone and the girl on the phone had a very strong accent, I couldn't understand anything and I asked what is your name and she said why should I tell you, why should I give you my name and when I told her I want to speak to her manager she just cut off the phone and that's the way she is and also she could not see me on the phone if I am white, but she could see my name that I am from Kosovo whatever, I don't have any bad experiences from English people but I have some bad experiences from British people who are not white, maybe I'm wrong hopefully I'm wrong, hopefully that wasn't the case but that's how I felt”*, P3).

Finally, another source of this xenophobic attitude seems to derive from the media according to P3, who used to be a journalist (*...and all this media problems, this media coverage of asylum gives you, it gave me and still gives me another punch in my psychological well being, for example when you read these article depicting refugees as terrible people, tabloids especially the Sun, Daily Mirror, a xenophobic way of dealing with foreigners... ”*, P3). However, refugees who happen not to have learnt English yet seem to be oblivious to the problem, as in the case of P4 (*“I don' have a TV (laughing), I can't read English anyway, only I see the pictures”*, P4).

c. Feeling ignored and undervalued

P3 related his *experience* during his asylum application: *“Because the solicitors don't care really, generally solicitors don't care especially when you are in this position, a refugee, because they underestimate people, they think they are refugees”*(P3). When P3 started complaining about his housing problems the reaction he received was a very negative one and he thought about it as another instance of refugees being treated as inferior (*“so last time I complained they said they were not going to renew my contract so I might be out, so that is the same thing with the solicitors they underestimate refugees asylum seekers”*, P3). P5 described a very traumatic situation during his asylum interview when he suffered a heart attack because people kept ignoring what he was telling them about his condition (*“it was quite a traumatic time because when I went for an interview they put me through a very difficult time, I told the guard that my heart is hurting me but they didn't listen to me, so when I came home I had a heart attack, I went to the hospital and there was an operation on my heart”*, P5). In another statement P5 expresses a similar feeling which conveys at the same time a sense of powerlessness: *“Because we are strangers in this country they can do whatever they want to us”*, P5. P4 related a very stressful experience that happened while waiting in the Council for his housing problem: *“Because when I got my diagnosis and showed all my papers from my GP and other doctors to the housing people and they told me that we don't believe your papers we've got our own doctors and it was like the last stroke and when I heard that I passed out. It was like, after one's week waiting. After that I was given a room (laughing)...”* (P4).

What causes anxiety and depression at present?

In this part the participants' responses to questions six and seven were analyzed. Both questions focused on exploring possible sources of such negative feelings or psychological states as anxiety and depression, often said to be experienced by traumatized refugee and asylum seeker populations (e.g. Silove et al, 1997). The concern here was with

not so much causative or initiating factors of PTSD, often related to pre-migration stressors, but rather with the so-called sustaining factors affecting these populations after they have settled in the host country. The following themes emerged from the participants' accounts of what they regard to be the main reasons for feeling depressed or anxious in their day-to-day life in London.

a. Concerns over relatives and friends

P1 reported that she was feeling anxious at the time of the interview because her mother was having an operation on that day (*"My mum is having an operation today and that makes me anxious, at the moment I am thinking about my mum"*, P1). She also reported feelings of sadness over her brother's decision to ask her to move out of his house (*"My mum is not well and a few months ago my brother asked me to leave the house and I stay with friends now, that made me feel really sad"*, P1). What really seems to depress her, however, is the fact that her husband is still missing (*"The only thing that makes me sad is not knowing if my husband is alive or not"*, P1).

P3 feels anxious about his son's future although he admits that he should not worry so much since his son's future seems to be more secure in Britain than it would have been if he stayed in Kosovo (*"...maybe because I have suffered so much, I don't want to see him (his son) being in the same position as I am, but luckily he isn't, so maybe he will not suffer, hopefully, but I am anxious about him, about his future although his future must be more secure here than in Kosovo but again"*, P3). He explains the source of his anxiety to be the traumatic and stressful events he has experienced and also the so-called limbo position he has been in since his time in Kosovo. Asked if he has recently been feeling anxious, he replied: *"Oh, many times, many times, again all relates to the limbo position and the previous experiences like, you know, I am anxious about everything now I have started to be anxious about my son, what is going to happen to him if he is going to have any illness"*, P3. P3's anxieties about his son seem to be attached, quite often, to current affairs issues that have been extensively publicized in the media such as the phenomenon of global warming (*"Global warming...I believe global warming is happening now, is very dangerous, so I worry about my son, for example, about the future, what is going to happen*

Their answers seemed to point to the fact that, while living in London, certain reminders of distressing past events, such as policemen, could trigger in them feelings of being unsafe or under threat. The same theme appeared when participants were asked to say what are the things that make them feel anxious or depressed in their day-to-day life in London.

P3 talked about how receiving phone calls after midnight made him anxious because it reminded him of surveillance tactics employed by the police in Kosovo (*"...if somebody makes phone calls after 12 at night I don't like it because having had problems with the police it reminds me when I had problems with the police when I was a student activist and journalist back in Kosovo they used to follow me and other fellow students and the police used to call on my phone at home during the night for example at certain intervals"*, P3). At another point he admits that *"I am still afraid of the police, hopefully this will fade and I will start having a normal life but now I am still like this"*, P3).

P2 explained that watching certain things on television that remind him of his traumatic experiences often make him feel anxious and distressed (*"Yes, whenever see blood on the screen, on TV, or any other adversity or the news sometimes I feel terrible and all the bad memories come back"*, P2). Sometimes when his friends start talking about his native Sri Lanka he gets distressed (*"Yes, and then at other times when my friends come and talk about events in Sri Lanka that causes me a lot of distress and I get in a kind of condition where I can't think and I can't keep control of my emotions or senses"*, P2). He also experienced anxiety during his interview because he had to talk about his past (*"...even now I find it very hard relating this experience that I have had because this is giving me a lot of anxiety and emotionally feel very distressed"*, P2). Often reminders of the past appear through nightmares (*"Sometimes when I sleep I jump out of bed with an anxious feeling like if I have been treated in the same way I had in Sri Lanka..."*, P2)

c. Dangers of life in London

Life in London presents certain dangers which could be upsetting or anxiety provoking to almost anyone, such as terrorism, street crime, etc. The effects of these dangers on people who are already traumatised, quite often from similar kinds of events,

might function as powerful reminders of their initial traumas or even re-traumatize individuals.

P3 talked about two terrorist attacks perpetrated by the IRA in an area of London very close to where he lived with his wife:

- "In the place where I lived we had two bombs which they had been exploded like 3 years ago, it was the Real IRA, I was quite frightened, it happened twice I think it was 3 years ago, 50 meters from where I live where they had put the bomb" (P3).

- "So you had the actual experience of terrorism" (interviewer)

" Yea, I knew actually because when I heard the sound it wasn't so strong but I heard it and I told my wife that's a bomb and it was the IRA and it happened twice, the second time was 300 to 500m from the place but luckily no one was killed, it was only the threat maybe they didn't want to kill" (P3).

P2 witnessed a murder in an area of London near where he lives (*...I witnessed a murder in Wembley which caused me a tremendous amount of distress and I didn't know how to cope with that", P2).*

The role of organizations: Health and Social Services.

In this part the participants' responses to questions eight and nine were analyzed. These questions sought to explore participants' experiences of supportive agencies in Britain, such as the health and social services as well as some professional organizations.

The health and social services were generally described in positive terms: *"Generally speaking I think it was a good experience" (P4), "I didn't have any bad experiences, I was quite happy, they are ok" (P3), "I had a very good experience with the health and social services in England" (P2), "when I face any problem I know I can come here (at the refugee centre) and they are very helpful and they help me a lot" (P5).* The major themes concerning the health and social services and some professional organizations appeared to be the following two:

a. Communication

Communication is regarded here in its more general sense including the aspects of understanding, accessibility, language, the provision of advice and keeping people in contact. When P3 was asked about any benefits coming from the health and social services or from any professional organizations he has been in contact with, he talked about two things in particular, “understanding people” and the coming together of people facilitated by the professional organization in which he belongs: *“ Oh, there are a lot of them like understanding people like doctors for example or I belong to this organization called “...” (name of organization) and I am also member of “...” (name of organization) so they helped me a lot... they have this email list which is very good and we have these meeting once a year, last time it was in “...” (name of an English town) so we met there, different “...” (name of profession) from different countries, it was a very good experience”, (P3); “and you can see there are a lot of good people who try to help and they helped me a lot, like organising petitions for me and my wife, they sent emails and advise on how to find jobs... ”, (P3).*

P3 had, however, some communication problems with the social services (*“I had some problems, it’s the same thing as immigration, people look at you differently, I have applied with my wife for some help 3 months ago and they are not responding and I call them on the phone and they tell me will call back but they don’t”, P3*). This single negative incident seems to relate however to a kind of “racist” attitude he encountered particularly from British non-white people as he explained: *“I find it a bit like, it seemed to me like racism, it’s not like racism from English people, racism from some other people, when I initially came to this country , when I went to the social services , maybe I’m wrong I don’t know, it was a black woman and she said, “ah you come for fresh money”, it was very insulting at that time, I couldn’t speak proper English but I knew what she was trying to do and I had this experience many times because I think black people and Asian they have suffered in England from racism so when they deal with a white person who is from the Eastern Europe or Southern Europe they try to show themselves as superior... ”, P3)*

P2 talked about the accessibility of the system, the ease of communication, the provision of advice and the keeping of a record of his health progress: *"I had a very good experience with the health and social services in England because they have always been very helpful to me and have been immediately accessible and I can talk easily to them and get help especially because they have arranged for a Tamil interpreter... also keeping track of my progress over a period of time and giving me advice"* (P2). When, however, his asylum application was rejected P2 stopped receiving support as well as any communication from an organization which had helped him to go on an English course and also assisted him financially (*"I tried for a long time to get help from them and they didn't let me know what was going to happen and they didn't even answer my letters and that caused me some sadness"*, P2).

P5 experienced some problems because he was not provided with an interpreter as he explained in the following dialogue:

- *"So the main problem is that they don't provide you with an interpreter"* (interviewer).

- *"Yes, because when I go to the hospital I can't talk about my problems for example I've got a cancer of bladder but I can't talk about my problem and they don't provide me with an interpreter. For example, if I go to the doctor and I have a pain in my kidney I can't tell them I have a pain in my kidney"* (P5).

- *"So, how can you communicate with the doctors?"* (interviewer)

- *"The thing is that I can speak to them in a very basic English, they try to understand me but I can't say the things that I really want to talk about and I normally I use my hands and my face to explain things"* (P5).

At the time of the interview P5 was on an English course but he was concerned about not being able to explain himself at times when he does not feel well and it is at times like these that he feels he needs an interpreter (*"I have been doing some studying in college, I went to a college for English studying, I am very good, I can pass my exams and everything but sometimes I feel very bad and the problem is that they don't provide me with an interpreter, so I can't explain things, I can't talk about my feelings because my English is not very good"*, P5). P5, however, does not seem to think of the fact that a translator is not always available as a major problem as he seems to put it in perspective and within the

wider context, which is mainly positive: *“Because they are accepting us in their country and taking care of us, when I say that there is no interpreter it doesn't mean that it is a bad point about them”* (P5). P5 thinks that it is necessary to learn English since he is not sure if he returns to Iran and so he recognizes the need to communicate (*“I live in here and I might be living for a long time. I don't know if I am going to go back to Iran and so I have to learn English in order to communicate with people”*, P5).

P4 identified the problem of not knowing English as one of his main concerns:

- *“Anything else you would like to add?”* (Interviewer)

- *“The main problem is language, because when I get all these letters from the social services, the Home Office etc, I don't know where I can find an interpreter for example (showing some papers) I got this document and I can't read it... again the problem is with the interpreter. I like my G.P, he is a nice doctor but again if it is an arranged appointment is ok but if it is spontaneous is difficult for me to communicate”*, (P4).

At another point P4 was complaining about having been made to wait too long, especially in regard to his housing, and due to his lack of English he felt frustrated that he was not in a position to have a say (*“because I don't speak English I can't insist on something and this is difficult for me”*, P4).

b. Dependency

Although P3 was generally satisfied with the health and social services (*“I didn't have any bad experiences, I was quite happy, they are ok”*, P3), he did however mention the negative psychological impact that the reliance on such services had on him:

- *“I don't know, social services you know, it's not good, it's not healthy, it's not good to rely on social services , for example, but when you come to this country it's a necessity and also because of the limbo for sometime I didn't have the right to work for example and I had to rely on social services and although sometimes I used to work but not all the time and you know it's very bad really it makes you feel very low and that helped (sustain) my depression”* (P3)

- *“What is the thing that makes you feel low?”* (Interviewer)

- "Like living from the handouts, living from the money of the government, not being able yourself to work, I still feel low because I still now get help from the social services until I hopefully feel better and find a job but it's very bad really because I have to rely on that, I hate it, I hate it" (P3).

P2 found it very difficult to financially support himself after the rejection of his asylum application and he was feeling uncomfortable having to depend on his friend for assistance (*"I have been trying to get some financial support without success and I feel embarrassed for keep asking my friend who is looking after me"*). However, unlike P3, when there was an accessible financial help from the social services P2 did not complaint about dependency (*"they helped me first by giving me a voucher for 38 pounds per week which I was able to cash and that was very useful... there is another organization that helps refugees in London and they provide me weekly with some food items and tins and other things and that has been a great help to me and there are some people there who are going to help me in other ways as well"*, P2).

Similarly, P4 did not mention any problems with having to depend on social services (*"Generally speaking I think it was a good experience. I don't pay anything and once a week I go to the social services, because I could get some food and clothes. You can buy very cheap, there was free coffee, everything is ok"*, P4).

Psychotherapy

In this final part the participants' responses to question ten were analyzed. The question sought to explore how the participants perceived the psychological treatment they had received while in Britain. Unlike other parts of this analysis, participants' responses presented a homogeneously positive picture which can be described in the following two themes:

a. Specific techniques/instructions

P1 described a mainly motivational set of instructions provided by her therapist in order to treat her depressive symptoms (*"he gives me the positive side to see ... he is trying to make me happy, he is asking me to grab the life"*, P1). P2 also talked about a similar set of instructions aimed at treating feelings of depression (*"gave me specific things that I could do when I was getting upset and also generally about how to keep happy and keep positive and to think about the positive things that I experienced in Sri Lanka as these things helped me to get a progressively positive attitude.."*, P2). Two of the participants reported benefiting from the therapy because their therapist helped them with some non-psychological issues that nevertheless were considerable sources of distress for them: *"I had 3-4 appointments with psychologists and it was very useful and in addition the psychologist helped me with the housing"* (P4), *"Doctor gave me letters to support my asylum application"*, (P2).

b. The relation with the therapist

P2 described how frightened he felt, during the initial sessions with his therapist, because he was not sure of what to expect and how the trust between him and his therapist was going to develop. In his account he stresses the fact that his trust developed because he could actually feel the honest desire of his therapist to help him (*"At the start I was frightened because I wasn't sure but little by little I gained confidence by her reassurance and her willingness and her wanting to help me and I could feel that, I sensed that..."*, P2). He also talked about two important qualities in his therapist's attitude towards him, patience and being non-critical: *"I was able to express myself and all my problems for which she has been patiently listening to me not in a critical way"*, P2).

A sense of trust was deemed important by P1 in her relation with her therapist (*"he trusts me I can do that"*, *"I can talk about things I cannot talk with anyone"* P1), and also a sense of personal involvement from the part of her therapist (*"he wouldn't let me to harm myself"*, P1).

P4 also expressed a sense of trust and the benefit of being able to talk freely to his therapist (“...when I talk to him I feel kind of free, that all this stress is going away, so I feel much better”, P4).

Table 5.2: A summary of the themes/constructs revealed through Interpretative Phenomenological Analysis (IPA) of participants’ interviews.

<u>What is unsafe?</u>	<u>Relevant issues</u>	<u>Relevant themes/constructs</u>
In home country	Belonging to a minority group, Collapse of the state, War.	1a. Feeling unwanted /isolated 1b. Discrimination/persecution 1c. Unpredictability/uncertainty 1d. Living under threat
The flight	The hardships of traveling illegally	2a. Unpredictability/uncertainty 2b. Having no choice/control
In London	Housing, local people, psychological health, threats from home country, the asylum process.	3a. Reminders of the past 3b. Uncertainty/unpredictability 3c. Not having my own place
<u>What is traumatic?</u>	<u>Relevant issues</u>	<u>Relevant Constructs</u>
In home country	Abuse from the police, abuse and torture from the government’s army	4a. Under surveillance 4b. Life threat 4c. Losing people
The flight	The hardships of traveling illegally	5a. Getting caught and sent back
In London	Immigration, the asylum process, breakdown of familial and social networks, media portrayal of asylum seekers and refugees.	6a. The limbo 6b. Xenophobia/sense of discrimination 6c. Feeling ignored and undervalued 7a. Concerns over relatives and friends 7b. Reminders of the past 7c. Dangers of life in London. 8a. Communication 8b. Dependency 9a. Specific techniques 9b. The relation with the therapist
<u>What causes anxiety and depression at present</u>		
<u>Health and Social Services, other organizations.</u>		
<u>Psychotherapy</u>		

5.3.2 Repertory grid analysis

The case of P1

An Idiogrid (Grice, 2004) analysis of P1's repertory grid revealed a very tightly organised system with 79.26% of its total variance accounted for by the first principal component. There was a small second component which accounted for just 7.55% of the variance. This suggests a characteristically uni-dimensional way of construing that often develops after some major invalidation (Kelly, 1955) of our way of thinking about the world has taken place.

People who construe tightly or uni-dimensionally may be at psychological risk since any new information that could potentially be used to revise or update the person's thinking is routinely ignored or interpreted in such a way as to conform to the existing structure. In the case of PTSD patients this could lead to a reluctance or inability to conceive of reality in any other way that would suggest alternatives to the major invalidation caused by trauma. Previous research by Winter and Gould (2000) has also found tight construing among a group of PTSD patients with different types of trauma history. Such a tight system, however, is not unique to PTSD patients but has also been found to be a prominent feature of, amongst others, neurotic patients (Caine, Wijesinghe, & Winter, 1981; Ryle, 1975).

A Gridstat (Bell, 1998) analysis of construct asymmetric relations revealed six superordinate, or else predicting, constructs (Table 5.7). All of them express a variant form of happy/unhappy with the only exception of the "bad-good" construct that might imply moral judgment. Thus, P1 seems to construe her experiences mainly in terms of a single affective state, narrowing in this way her ability to conceive alternative and potentially more adaptive ways of thinking about her experiences. These superordinate constructs, however, are not the ones used to construe her traumatic experience as can be seen in

Figure 5.2³. As can be seen in the plot, there are four constructs that P1 uses to construe her trauma that relate to feelings of grieving, loss and the sense of being unsafe.

A Gristat analysis of element asymmetric relations showed that the most superordinate (important) element in the participant's life seems to be the anticipation of receiving bad news about her lost husband (elem. 15) rather than the original trauma itself (Table 5.7). As the former is a current concern it seems that issues which asylum seekers experience in their host countries could often stem from their traumatic experience and sometimes, as in this case, can even supersede in importance their original trauma. This in turn implies that in many cases the trauma experienced by asylum seekers is not resolved by the time they leave their countries and often have to live under constant threat in their host country while waiting to hear about the final outcome or the resolution of the situation related to their trauma. In the case of P1 her husband ran away from home, in their native country, in order to avoid persecution from the police and since then she has not heard from him.

From Table 5.3 it is also evident that element 15 ("to hear bad news about my husband") is the one being construed as the closest to the trauma (element 11). This means that the two elements are construed in an almost identical fashion, providing some further evidence that trauma is still psychologically current in the participant's mind. At some distance apart is her grandmother's death and her own arrest and harassment by the police in her native country. An event (element 10) that took place in London, where the participant currently lives, also had a very negative impact on her, when her brother told her that she was not welcome in his house and asked her to leave. The participant's journey from Turkey to Britain (elem. 13), although negative, has the same distance (0.80) from the trauma as the leaving of her job at age nineteen (elem. 6), thus suggesting that was probably not of a particularly traumatic nature.

³ In the present analysis all elements and constructs appearing in the same quadrant as the traumatic event are taken by convention to be as the most relevant for the analysis of the latter. This is not a commonly held view but it was nevertheless adopted in order to provide a unifying criterion in the analysis of all four cases.

Table 5.3: P1's element distances between the traumatic event (elem. 11) and the four closest elements to it.

<u>Distances</u>	<u>Element labels</u>
0.16	Bad news about my husband (elem.15)
0.53	My grandmother died (elem. 4)
0.64	I was arrested in Turkey (elem. 12)
0.73	My brother asked me to leave his house (elem.10)

A HICLAS analysis (De Boeck, 1992) using the form of clustering that combines the emergent and the implicit poles together, as fully explained in Chapter 3, was used in all cases of this study. The elaboration index of the traumatic event was compared in all cases with a standard element (element 3, see elements' description in Appendix A) which was purposely chosen as representing the least likely element to have any connection with trauma. In accordance with Sewell et al's (1996) hypothesis that the traumatic event will be less elaborated, P1's trauma element appeared to be less elaborated than the standard element (elem. 3) thus providing support for the model.

<p>Stressful</p> <p>Nothing</p> <p>Bad</p> <p>Crying</p> <p>Sad</p> <p>Feeling down</p> <p>Feeling desperate</p> <p>Feeling ill</p>	<p>Not proud</p> <p>Unsuccessful</p> <p>Sad feeling</p> <p>.13(-)</p> <p>.8(-)</p> <p>.12(-) .6(-)</p>	<p>Comp.2</p>	<p>Not to lose someone</p> <p>Not to grieve</p> <p>Feeling safe</p> <p>Good news</p> <p>.14(+)</p> <p>.9(+)</p> <p>.3(+)</p>
<p>Bad news</p> <p>Feeling unsafe</p> <p>To grieve</p> <p>Losing someone</p>	<p>.15(-)</p> <p>.11(T)</p> <p>.4(-)</p> <p>.10(-) .2(-)</p>	<p>Comp.1</p>	<p>.7(+)</p> <p>Being able</p> <p>.5(+)</p> <p>Being well</p> <p>.1(+)</p> <p>Over the moon</p> <p>Happiness</p> <p>Cheerful</p> <p>My husband</p> <p>Being successful</p> <p>Being proud</p> <p>To laugh</p> <p>Good</p> <p>Without stress</p>

(Element labels) 1. My best friend "A" 2. My mum's operation 3. A trip with my parents 4. My grandmother died 5. Starting work at eighteen 6. Leaving work at nineteen 7. My sister got married 8. My mum was ill 9. getting my visa 10. My brother asked me to move out of his house 11(T) My husband disappeared in Turkey 12. I was arrested in Turkey 13. My journey from Turkey to England 14. To hear from my husband 15. Bad news about my husband.

Figure 5.2: Plot of elements in construct space from P1's grid.

<p>Stressful</p> <p>Nothing</p> <p>Not proud</p> <p>Bad</p> <p>Crying</p> <p>Unsuccessful</p> <p>Sad</p> <p>Sad feeling</p> <p>Feeling down</p> <p>Feeling desperate</p> <p>Feeling ill</p> <p>.13(-)</p> <p>.8(-)</p> <p>.12(-)</p> <p>.6(-)</p>	<p>Comp.2</p> <p>Not to lose someone</p> <p>Not to grieve</p> <p>Feeling safe</p> <p>Good news</p> <p>.14(+)</p> <p>.9(+)</p> <p>.3(+)</p>
<p>.15(-)</p> <p>Bad news</p> <p>.11(T)</p> <p>.4(-)</p> <p>Feeling unsafe</p> <p>To grieve</p> <p>.10(-)</p> <p>.2(-)</p> <p>Losing someone</p>	<p>.7(+)</p> <p>Comp.1</p> <p>Being able</p> <p>.5(+)</p> <p>Being well</p> <p>.1(+)</p> <p>Over the moon</p> <p>Happiness</p> <p>Cheerful</p> <p>My husband</p> <p>Being successful</p> <p>Being proud</p> <p>To laugh</p> <p>Good</p> <p>Without stress</p>

(Element labels) 1. My best friend "A" 2. My mum's operation 3. A trip with my parents 4. My grandmother died 5. Starting work at eighteen 6. Leaving work at nineteen 7. My sister got married 8. My mum was ill 9. getting my visa 10. My brother asked me to move out of his house 11(T) My husband disappeared in Turkey 12. I was arrested in Turkey 13. My journey from Turkey to England 14. To hear from my husband 15. Bad news about my husband.

Figure 5.2: Plot of elements in construct space from P1's grid.

The case of P2

P2's Idiogrid analysis revealed a tightly organised construct system with the first principal component accounting for 72.84% of the total variance and a second component accounting for just 11.93% of the variance.

A Gridstat analysis using asymmetric measures (see Bell, 1996) revealed three superordinate constructs (Table 5.7) which seem to concern affective states (happy/worry, bad/good memories) and relatedness (to be a friend of someone/alone). Using the same analysis for elements, P2's traumatic experience (element 9) appears to occupy a superordinate position, having the exact same index of predictive value (0.074) as element 13 ("if I get expelled from Britain") as shown in Table 5.7. This is an indication of how the mere possibility of a deportation from Britain might carry the same traumatic implications as the original trauma experienced in the participant's native country. The most superordinate element of all is an anticipatory one (if I can reunite with my wife in Britain) that shows how a past experience, closely related to the participant's trauma (the loss of his wife after he was arrested by the army), can relate to his anticipation of the future as experienced at present in the host country (Britain). It should also be noted that half of his superordinate elements relate to events experienced in his home country and half relate to events in Britain. Perhaps a measure of the negative impact accorded by the participant to the possibility of his deportation from Britain is the fact that he used two elements to express it (elem. 8: Sent back to my country; element 13: If I get expelled from Britain).

Element distances, from an Idiogrid analysis (Table 5.4), interestingly reveal that P2 construes in exactly the same way a negative experience closely linked to, if not part of, his traumatic experience (element 15) and the possibility of deportation from Britain as expressed in the two identical elements mentioned earlier (elements. 8 & 13). This finding supports the view that the asylum process not only could potentially re-traumatize asylum seekers but also that re-traumatisation can occur on the basis of an experience that from the

asylum seeker's perspective is of almost the same proportions as the original trauma. From the semi-structured interview conducted with the participant it is known that element 15 was the first traumatic event experienced during which P2's life was seriously threatened.

Table 5.4: P2's element distances between the traumatic event (elem. 9) and the four closest elements to it.

<u>Distances</u>	<u>Element labels</u>
0.18	Navy fired at our boat and had to swim ashore.(elem.15)
0.18	If I get expelled from Britain (elem. 13)
0.18	Sent back to my country (elem. 8)
0.74	Abandoned in the jungle (elem.11)

Finally, the construct poles employed (see Figure 5.3) to construe the traumatic event (element 9) could be categorised in the same way as the superordinate constructs revealed by the Gridstat analysis mentioned earlier. These are, first, an affective state resembling depression (felt unworthy, in desperation) and, second, relatedness (hurt others, abandonment). The opposite poles of these constructs emphasise more the latter category (helping others, being cared for, felt useful). Finally, a HICLAS analysis revealed that contrary to the expected low elaboration of the traumatic element this appeared to be considerably more elaborated (index 5) than the standard non-traumatic element (index 2).

<p>Death in family</p> <p>Hardship</p> <p>Fear</p> <p>Alone</p> <p>Worry</p> <p>Uncertainty</p> <p>Anxiety</p> <p>Bad memories</p> <p>Hopeless</p>	<p>.4(-)</p> <p>.6(-)</p> <p>.11(-)</p>	<p>Comp.2</p> <p>.2(-)</p> <p>.14(+)</p> <p>.10(+)</p>	<p>Helping others</p> <p>Felt useful</p> <p>Confident</p> <p>Being cared for</p> <p>.5(+)</p> <p>Comp.1</p>
<p>Abandonment</p> <p>In desperation</p> <p>Felt unworthy</p> <p>Hurt others</p>	<p>.8(-)</p> <p>.13(-)</p> <p>.9(T)</p> <p>.15(-)</p>	<p>.7(+)</p> <p>.1(+)</p> <p>.3(+)</p>	<p>Having hope .12(+)</p> <p>Good times</p> <p>Anxiety free</p> <p>To be someone's friend</p> <p>Comforted</p> <p>Happy</p> <p>Security</p> <p>Calmness</p> <p>Family happiness</p>

(Element labels) 1. A friend R 2. Getting a beating from master at school 3. Sister got married 4. Father died 5. Got a job 6. Brother shot dead 7. When I came to Britain 8. Sent back to my country 9(T). Caught by the army and beaten 10. Talking to fellow escapees 11. Abandoned in the jungle 12. Reunite with my family in Britain 13. If I get expelled from Britain 14. Rescued people at the sea 15. Navy fired at our boat and had to swim ashore.

Figure 5.3: Plot of elements in construct space from P2's grid.

The case of P3

P3's construing appears to be uni-dimensional with only one principal component accounting for 76.58 % of the overall variance as derived from an Idiogrid analysis. There is also a lack of superordinate constructs according to a Gridstat analysis which revealed a total absence of asymmetrical relations within the patient's grid construct structure (see Table 5.7). Bell (1996) conjectured that such an absence of asymmetrical construing might prevent prediction.

Element-wise, however, there seems to be a total of three superordinate elements. As it can be seen in Table 5.7, two of the superordinate elements (elements.10 & 8) relate to experiences in the participant's home country and one (element 13) to Britain. The traumatic event itself did not reach a superordinate status but element 10 (under police surveillance) is experientially very close to the trauma (element 9) as can be seen from the distances between the two elements in Table 5.5. Seen in this light the participant appears to regard as the most important events in his life so far, first, an experience related to his traumatic encounter with the police in his native country; second, the death of his father; and third, gaining his asylum in Britain.

As can be seen in Figure 5.4, P3 construes his traumatic experience with the police (elem. 9) as closely linked to another three experiences which were also related to the police (elements. 10 & 4) and the army (element 6). As seen in Table 5.5, a fourth element closely related to the traumatic experience but further apart from the previous three was the death of the patient's father (element 8). Unlike his interview, where P3 talked extensively about the negative aspects of seeking asylum and living in London, he did not include any of those experiences as an element during his repertory grid element elicitation procedure. A provided element relevant to the asylum process could have potentially provided some information about the way the participant construed his traumatic experience, specifically in regard to the asylum process, throwing some light on the asylum seekers' re-traumatisation issue central to this study. The advantage of not using provided elements, however, could be that elicited ones reflect more accurately the participant's own way of thinking. The grid data reveal that as far as traumatisation is concerned the participant does not make any links between his original traumatic experience and events that took place since his arrival in Britain.

Table 5.5: P3's element distances between the traumatic event (elem. 9) and the four closest elements to it.

<u>Distances</u>	<u>Element labels</u>
0.18	Under police surveillance (elem.10)
0.35	Going to the army (elem. 6)
0.39	Teargas police attack (elem. 4)
0.58	My father died (elem.8)

Finally, the participant employs a set of construct poles with two discernible themes in order to construe his trauma. These are, first, a set that expresses negative affect (bad/negative experience, frightened, traumatized) and second a set that relates to his mistreatment by the police ("Big brother", police mistreatment, brainwashed). The central theme of the opposite poles of these constructs is the notion of freedom repeated in three construct poles (free society, freedom to choose, freedom) emphasizing in this way the socio-political aspects of his traumatisation (see Figure 5.4). A HICLAS analysis showed that contrary to Sewell et al's (1996) hypothesis the traumatic element appeared to be more elaborated than the standard non-trauma element (element 3).

<p>Losing a dear one</p> <p>Anticipation</p> <p>Not in love</p> <p>Worried</p> <p>Sadness .12(-)</p> <p>Insecurity .15(-)</p> <p>Spiritual pain .2(-)</p> <p>Terrible experience</p> <p>.8(-)</p>	<p>Comp.2</p> <p>Free society</p> <p>Freedom</p> <p>Freedom to choose</p> <p>Good experience</p> <p>.1(+)</p> <p>Treated with respect</p> <p>.11(+)</p> <p>Being brave</p> <p>Good experience</p> <p>.13(+)</p> <p>.5(+)</p> <p>Comp.1</p>
<p>.10(-) Negative experience</p> <p>.9(T)</p> <p>.6(-)</p> <p>.4(-)</p> <p>Frightened</p> <p>Traumatized</p> <p>Bad experience</p> <p>Brainwashed</p> <p>“Big Brother”</p> <p>Police mistreatment</p>	<p>.3(+)</p> <p>Good luck</p> <p>Feeling good</p> <p>.7(+)</p> <p>.14(+)</p> <p>Security</p> <p>Happy</p> <p>Go with the flow</p> <p>Optimism</p> <p>In love</p> <p>Loving a dear one</p>

(Element labels) 1. Chosen for a science competition 2. My grandfather died 3. A girlfriend 4. Teargas police attack 5. Going to a better school 6. Going to the army 7. Falling in love with my wife 8. My father died 9(T). Tortured by the police 10. Under police surveillance 11. Working as a journalist 12. Didn't complete my studies 13. Granted indefinite leave in Britain 14. My baby to have a better life 15. My family having health problems.

Fig. 5.4: Plot of elements in construct space from P3's grid.

The case of P4

A principal component analysis via Idiogrid showed that P4 was the most uni-dimensional construer of all the participants in this study. There was only one principal component found, defined as containing an eigenvalue > 1 , which accounted for 86.27% of the total variance of his grid. This is an extremely tight form of construing which, as already mentioned in previous cases, is a psychological risk factor since it leads to unvarying predictions that prevent the person from experimenting with reality and consequently leading to increased resistance to change.

A Gridstat analysis of construct asymmetric relations revealed two superordinate constructs (Table 5.7), one of which (fear/happiness) was used by the participant in his construing of his traumatic experience (Figure 5.5). This runs contrary to the personal construct model of PTSD (Sewell et al, 1996), which predicts that there is often a lack of superordinate constructs involved in the construing of the traumatic experience in PTSD patients.

The content of the constructs which P4 applied in the construction of his traumatic experience seems to reflect interpersonal relations (lonely, humiliation, violence, loss) in which a moral concern is also evident (what people should not do) along with adverse psychological reactions (fear, negative experience).

An analysis of element asymmetric relations via Gridstat revealed that by far the most superordinate of the participant's elements is the one concerning his potential deportation from Britain (If I am sent back to Georgia). His actual trauma came only fourth (Table 5.7) in terms of its predictive value implying that asylum seekers while living in their host country may construe existing as well as prospective negative experiences as potentially carrying more negative implications than their original traumas. As the traumatic event has exactly the same predictive value (0.285) as well as zero element distance (see Tables 5.7 & 5.6) from elements nine and ten we can regard them as different aspects of the same traumatic event. Thus, it is important to point out that two out of three (if elements 9, 10 & 11 are seen as one and the same element) superordinate elements concern life in Britain, with the third element being the trauma itself.

Table 5.6: P4's element distances between the traumatic event (elem. 11) and the five closest elements to it.

<u>Distances</u>	<u>Element labels</u>
0.00	The state confiscated my farm (elem.9)
0.00	Having problems with local people (elem. 10)
0.35	I got bullied at school (elem. 4)
0.53	My boss refuse to teach me (elem.6)
0.58	If I am sent back to Georgia (elem.15)

If we look at the element distances and their plot in construct space (Figure 5.5) we can see that the fear of getting sent back to his native country (element 15) is construed by the participant as far apart, and within a different quadrant, from his trauma. That means that although the fear of deportation looms larger than the trauma in the participant's construing, as superordination measures revealed, this does not mean that deportation is "more traumatic" than the original trauma since the two elements/events are construed separately and distinctly from one another. A HICLAS analysis appeared to show exactly the same index of elaboration for both the traumatic and the standard non-traumatic element (element 3).

<p>Lonely</p> <p>What people shouldn't do .12(-)</p> <p>Fear</p> <p>Negative experience .6(-)</p> <p>Violence</p> <p>Humiliation .10(-)</p> <p>.9(-) .11(T)</p> <p>Loss .4(-)</p> <p>.2(-)</p>	<p>Comp.2</p> <p>England</p> <p>Feeling safe</p> <p>People to be good</p> <p>Good law</p> <p>Good contacts</p> <p>.8(+)</p> <p>A step ahead .13(+)</p> <p>Not suffering .14(+)</p> <p>Good relationships</p> <p>Comp.1</p>
<p>Arguments .15(-)</p> <p>Suffering</p> <p>Staying in a bad situation</p> <p>Feeling offended</p> <p>No justice</p> <p>Unpleasant</p> <p>Feeling anxious</p> <p>(The state of) Georgia</p>	<p>.7(+)</p> <p>Not humiliated</p> <p>Happiness</p> <p>.1(+)</p> <p>To find something</p> <p>.5(+)</p> <p>Happiness</p> <p>.3(+)</p> <p>Nice memories</p> <p>What people should do</p> <p>Not lonely</p>

(Element labels) 1. A present 2. An accident 3. Going to the army 4. Bullied at school for not speaking the language 5. Having my son 6. My boss refusing to teach me the job 7. Opened my own business 8. Coming to England 9. The state confiscated my farm 10. Having problems with local people 11(T). Getting beaten up by the police in Georgia 12. Got hit accidentally by a boy at a bus-stop in London 13. Getting my asylum 14. To bring my family to England 15. If I am sent back to Georgia.

Figure 5.5: Plot of elements in construct space from P4's grid.

Table 5.7: Participants' superordinate elements and constructs according to a Gridstat analysis.

Names	Elements	Constructs
P1	0.257 Bad news about my husband(U.K) 0.164 My husband disappeared (T) 0.162 To hear from my husband(U.K) 0.088 My grandmother died(Home) 52.38% Superordinate (S) 47.62% Equal (E) 0.00% Fragmented (F)	0.084 Bad/Good 0.079 Over the moon/Feeling down 0.076 Happiness/Sad 0.075 Stressful/Without stress 0.066 Sad feelings/Cheerful 0.062 Crying/To laugh 47.62% (S) 52.38%(E) 0.00% (F)
P2	0.154 If I can reunite with my wife 0.146 Navy ordered us out of the boat(Home) 0.074 Get caught by the army and beaten(T) 0.074 If I get expelled from Britain 27.62 (S) 66.67 (E) 5.71 (F)	0.089 Happy/Worry 0.07 To be a friend of someone/Alone 0.062 Bad memories/Good times 20.95 (S). 71.43 (E) 7.62 (F)
P3	0.137 I was under police surveillance(Home) 0.085 My father died(Home) 0.054 Being granted asylum(U.K) 23.81% (S) 71.43% (E) 4.76% (F)	0.0%(S) 100%(E) 0.00 (Fr)
P4	0.375 If I am sent back to Georgia(U.K) 0.285 The state confiscated my farm(Home) 0.285 Having problems with locals(Home) 0.285 Getting beaten up by the police (T) 0.053 I got hit accidentally by a boy(U.K) 57.14% (S) 42.86% (E) 0.00% (F)	0.103 Fear/Happiness 0.076 Feeling offended/Good contacts 10.48% (S) 89.52% (E) 0.00 (F)

Note: The decimal numbers next to the constructs and elements denote the order of superordinancy amongst them, larger numbers expressing more superordinate constructs or elements.

An overview of the cases

The following major points can be deduced from the repertory grid analysis of the four individual cases presented earlier:

i) A principal component analysis revealed a very large first component in all cases (Mean = 78.73%, S.D = 5.67). This is an indication of a relatively tight and uni-dimensional way of construing that has traditionally been thought of as a defence against anxiety (Kelly, 1955).

ii) A Gridstat analysis of construct asymmetric relations revealed either a total absence of superordinate constructs (as in P3's case), or, wherever present, participants did not involve them in the construing of their traumatic experience. This finding lends support to the personal construct conceptualization of trauma that regards this very inability of trauma related constructions to connect with overarching superordinate constructs as the main reason that the traumatic experience remains unelaborated and unintegrated with the rest of the construct system.

iii) A HICLAS analysis failed to support the elaboration hypothesis of the personal construct model (Sewell et al, 1996) since only in one case (P1) did the traumatic element appear to be less elaborated compared to the standard non-traumatic element (element 3).

iv) An analysis based on element distances indicated that participants construe currently experienced events, especially the possibility of deportation from Britain, as resembling their original traumatic experience (cases P2 and P4). Also, as in the case of P1, the original trauma may appear as essentially current since the participant lacks any conclusive information about it.

v) A Gridstat analysis of element asymmetric relations completes the picture drawn by the previous point by further revealing that the deportation issue, and unresolved traumas and issues relating to the granting of asylum occupy superordinate positions along with the original trauma. It should be stressed here that, in terms of superordinancy, trauma seems to often occupy a

secondary, or a less important, position when compared to the current issues concerning the lives of the participants. In one case (P3) trauma did not even reach superordinate status.

vi) Regarding the content of the constructs used to construe the traumatic experience a large number of them seemed to describe social relations contrary to an expected psychological content. To further examine this point the following content analytic study was conducted .

5.3.3. A content analysis of the trauma constructs

Based on the Idiogrid analysis (Grice, 2004), presented above, the trauma related constructs (those appearing in the same quadrant along with the trauma element) were collected and subsequently content analysed by the author. Three content categories emerged from the analysis including: a) Social relations; b) Psychological states; c) Negative experiences (see Table 1 in Appendix C). An inter-coder reliability check was performed with a research colleague (RC) who had previous knowledge of content analysis but was unaware of the study's objectives. The RC was asked to allocate the trauma related constructs to the three provided content categories. There was a satisfactory agreement between the two coders (Kappa = 0.93).

Table 1 (Appendix C) shows that the participants used almost double the number of constructs expressing social relations (54.5%) when compared to constructs expressing psychological states (27.2%). The difference between the "social relation constructs" and that of the less meaningful category of "negative experiences" (18.1%) was even bigger. The question of whether or not this is a chance finding or alternatively could be indicative of a feature characteristic of the asylum seeker and refugee population in general was further investigated.

Two variables were thought as potentially influential in the above outcome, first, being a refugee or an asylum seeker (variable 1), and second, the type of interpersonal trauma (variable 2) commonly experienced by these groups. In order to control for these variables two comparison groups were formed using participants from the PTSD study

(Chapter Two). Both groups contained non-refugee British people whose first language was English, in order to control for variable 1. The participants in the first comparison group had all experienced PTSD as a result of a car accident. The choice of this type of trauma was made as this was thought to be the type of trauma that would be least expected to have any interpersonal affiliations. Participants in the second group had all experienced trauma involving interpersonal violence or conflict. All groups contained the same number of participants ($n = 4$). Constructs derived from these groups were content analysed in the same way as for the refugee group (see Tables 2 & 3 in Appendix C). Inter-coder agreement for the car accident group ($Kappa = 0.88$) and for the interpersonal trauma group ($Kappa = 0.91$) was high.

As shown in Figure 5.6 the refugee group seems to differ from both the non-refugee-car-accident group and the non-refugee-interpersonal-trauma group. The refugee group seems to employ double or even triple the number of constructs expressing social relations in their construing of trauma when compared to the non-refugee groups. Furthermore, the refugee group uses less than half the number of constructs expressing psychological states compared to the other two groups. There seems to be a much less pronounced difference between the groups as far as the third category of negative experiences is concerned.

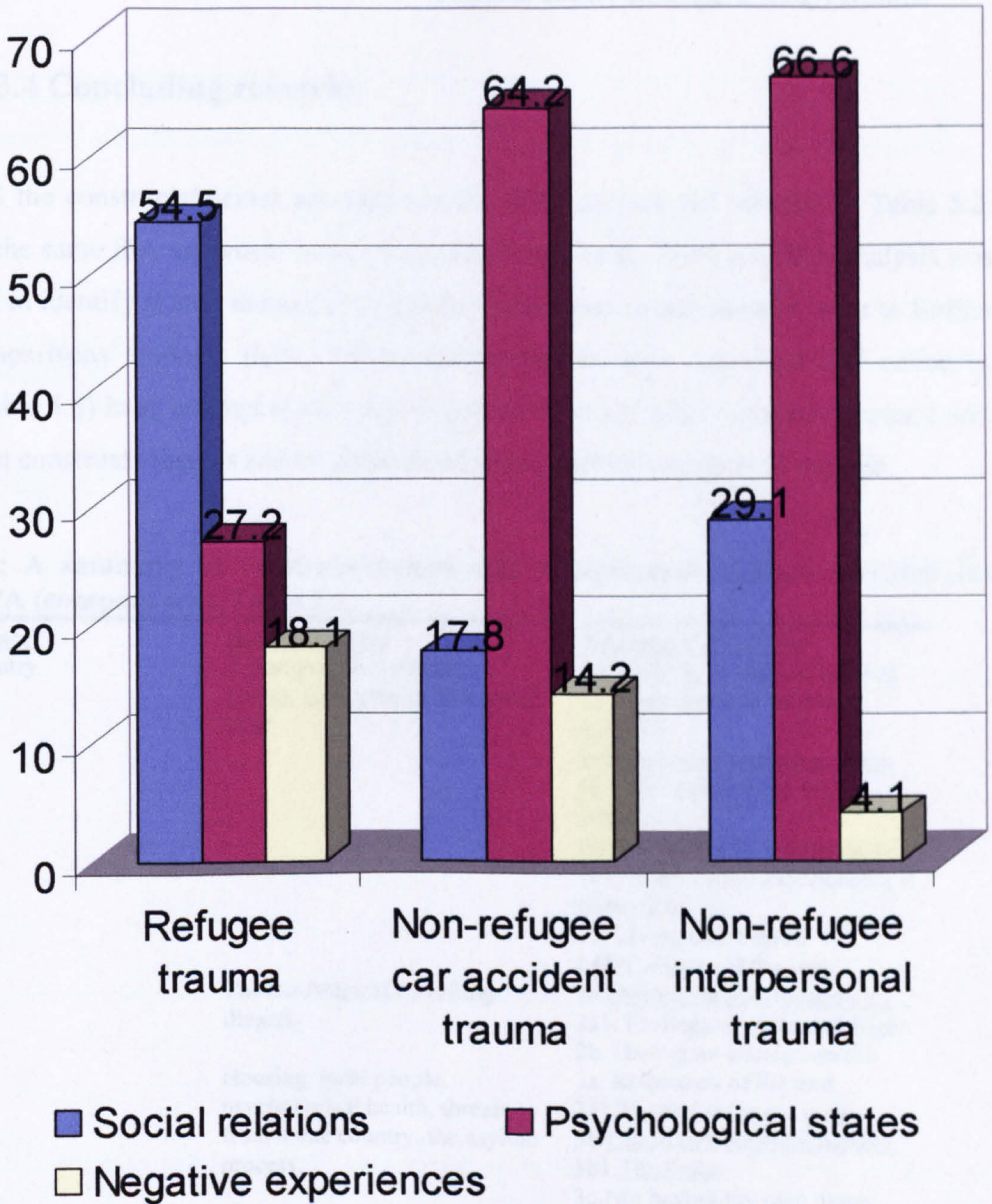


Figure 5.6: A comparative presentation of content categories found in refugee and non-refugee car accident and interpersonal traumas.

5.3.4 Concluding remarks

All the constructs/themes revealed via the IPA analysis can be seen in Table 5.2. Based on the same IPA analytical instructions (see Smith et al, 1999) a further analysis was performed to identify shared themes amongst the main constructs/themes in order to further assist comparisons amongst them. Sub-constructs/themes were produced and coded as shown (Table 5.8) in an attempt to identify the gist of what seemed to characterize each one of the main constructs/themes and to allow for similarities between them to emerge.

Table 5.8: A summary of construct/themes and sub-construct/themes revealed via further IPA (compare with Table 5.2)

<u>What is unsafe?</u>	<u>Relevant issues</u>	<u>Relevant Constructs</u>
In home country	Belonging to a minority group, Collapse of the state, War.	1a. Feeling unwanted /isolated 1a1. Belonging to an ethnic minority 1b. <u>Discrimination/persecution</u> 1b1. Belonging to an ethnic minority 1c. <u>Unpredictability/uncertainty</u> 1c1. "I have been experiencing it all my life" 1d. Living under threat 1d1. Collapse of the state
The flight	The hardships of travelling illegally	2a. <u>Unpredictability/uncertainty</u> 2a1. Feelings of panic and fright 2b. Having no choice/control
In London	Housing, local people, psychological health, threats from home country, the asylum process.	3a. Reminders of the past 3a1. The trauma is not over 3b. <u>Uncertainty/unpredictability</u> 3b1. <u>The limbo</u> 3c. Not having my own place
<u>What is traumatic?</u>	<u>Relevant issues</u>	<u>Relevant Constructs</u>
In home country	Abuse from the police, abuse and torture from the government's army	4a. <u>Under surveillance</u> 4b. Life threat 4b1. Of self and others 4c. <u>Losing people</u>
The flight	The hardships of travelling illegally	5a. Getting caught and sent back 5a1. <u>Uncertainty</u>
In London	Immigration, the asylum process, breakdown of familial and social networks, media portrayal of asylum seekers and refugees.	6a. <u>The limbo</u> 6a1. "Experienced it all my life" 6a2. <u>Under surveillance</u> 6a3. <u>Uncertainty</u> 6a4. Inability to plan or predict the future (<u>no control</u>) 6b. <u>Xenophobia/sense of discrimination</u>

Table 5.8 (continued)

<u>What causes anxiety and depression at present</u>	6c. Feeling ignored and undervalued 6c1. Powerlessness/ <u>no control</u> 6c2. <u>Discrimination</u> 7a. Concerns over relatives and friends 7a1. <u>Losing people</u> 7a2. <u>The limbo</u> 7b. Reminders of the past 7c. Dangers of life in London.
<u>Health and Social Services, other organizations.</u>	8a. Communication 8a1. <u>Discrimination</u> (from non-White British) 8a2. Problems with language 8b. Dependency 8b1. <u>The limbo</u>
<u>Psychotherapy</u>	9a. Specific techniques 9a1. Motivation 9a2. Support for practical issues (housing, asylum) 9b. The relation with the therapist 9b1. Trust and client's expectations 9b2. Therapist's characteristics positively valued (patience, trust, personal involvement, non-critical)

Constructs and sub-constructs appearing more than once (seen as underlined in Table 5.8) were thought of as forming construct clusters as shown in Figure 5.7. Connections between construct clusters were further identified in those cases where there was a sharing of constructs or sub-constructs between them. To demonstrate, as can be seen in Figure 5.7, the construct cluster “the limbo” connects with construct cluster “under surveillance” on the basis of sub-construct 6a2 of the latter cluster being part of construct 6a of the former cluster.

In summary, the analysis identified three types of construct clusters:

i) A master construct cluster:

This is “the limbo” construct cluster which connects with all but one construct cluster (“reminders of the past”) and for that reason appears as the most central one in Figure 5.7. It contains construct 6a (“the limbo”) which expresses a common feeling among asylum seekers, felt in the host country as well as throughout their lives (through 6a1). Since the participants expressed the idea of the limbo having a permanent presence throughout their lives (6a1) potential connections could also be drawn, for that reason, with all the constructs describing life at home and during the flight (constructs 1, 2, 4, 5).

ii) Social relations construct clusters:

These are the four construct clusters overlapping at the top of the “limbo” master construct cluster as shown in Figure 5.7. They all express some form of social relation and are presented in more detail below:

1)Discrimination/Persecution/Xenophobia (1b, 6b, 6c2, 8a1):

Constructs 1b (“discrimination/persecution”) and 6b (“xenophobia/sense of discrimination”) along with sub-constructs 6c2 (“discrimination”) and 8a1 (“discrimination from non-White British) form a connection that describes the sense of discrimination/persecution felt while living in the home country and that links with a similar sense of discrimination and xenophobia while currently living in London. It is interesting to note that whereas the discrimination experienced in the home country was described as “unsafe” (1b), the sense of discrimination and xenophobia experienced in London was labeled as “traumatic”(6b, 6c2). This could be regarded as an indication that i) experiences in the home as well as the host country could be construed in similar terms (e.g. discrimination experienced in both the home and the host country); ii) constructs used in the home country could be enriched and further elaborated to include additional meanings when used in the host countries (e.g. the concept of xenophobia added to the concept of discrimination) and iii) constructs used to describe certain experiences in the home country could be perceived more extremely when used in the host country (e.g. “discrimination” described as “unsafe” when experienced in the home country was regarded as “traumatic” in the host country).

2)Under surveillance (4a, 6a2): This construct cluster describes traumatic experiences in the participants' home country (4a) as well as in London (6a2). The feeling of being under surveillance as experienced in London appears to be part of the limbo experience (see Table 5.8). Although the asylum monitoring in Britain is very different from the police surveillance experienced by the participants in their home countries, the former, however, comes to acquire a similar status through association to the latter in the participants' minds.

3)Concern over relatives and friends (7a, 4c): The often interpersonal nature of the trauma endured by asylum seekers as well as the issues of social and cultural uprooting involved in having to flee their countries mean that most of them have experienced extensive break ups in their social networks. The experience of losing people at home was described as traumatic (4c) and it connects with current concerns over relatives and friends (7a) who have been missing, imprisoned, or left behind in the home country. The latter construct/theme (7a) was described by the participants as a current cause of anxiety and depression significantly contributing to the feeling of limbo.

4)Dependency (8b): This construct cluster contains a single construct/theme (8b) which seems to emanate directly from the experience of living in limbo. Being dependent on State benefits or friends' support was described by participants as a factor in the maintenance of their negative psychological state and especially depression.

iii) Psychological states construct clusters:

1) Unpredictability/Uncertainty (1c, 2a, 3b, 5a1, 6a3): This seems to be a pervasive construct cluster that runs through all the time-periods in the participants' lives. It has multiple links with the master-construct cluster ("the limbo") appearing both as subordinate (6a3) as well as superordinate (3b) in relation to it. In this regard, it could be seen as both a causative factor as well as a consequence of being in limbo. Phenomenologically speaking it was reported to relate to feelings of panic and fright (2a1) as well as feelings of depression especially through its connection with the limbo.

2) Reminders of the past (3a, 7b): This construct cluster seems to contribute to the feelings of being unsafe while living in London (3a) by keeping the

initial traumatic experience psychologically current (3a1). It also seems to contribute to feelings of anxiety and depression felt while living in London (7b). It appears to be the only construct cluster with no connections to the master construct cluster (“the limbo”)

3) No control over life (2b, 6a4, 6c1): The feeling of not having control over life was expressed in regard to the inability of planning or predicting the future while living in London (6a4). Having no control in that sense appears to be part of the limbo experience (6a) since the latter holds a superordinate position in regard to the former. Furthermore, the sense of not having control also relates to a sense of powerlessness (6c1) which seems to derive from feelings of being ignored and undervalued within the host society (6c). The only other occasion that feelings of not having control seem to emerge was during the flight when it was described in the context of feeling unsafe (2b).

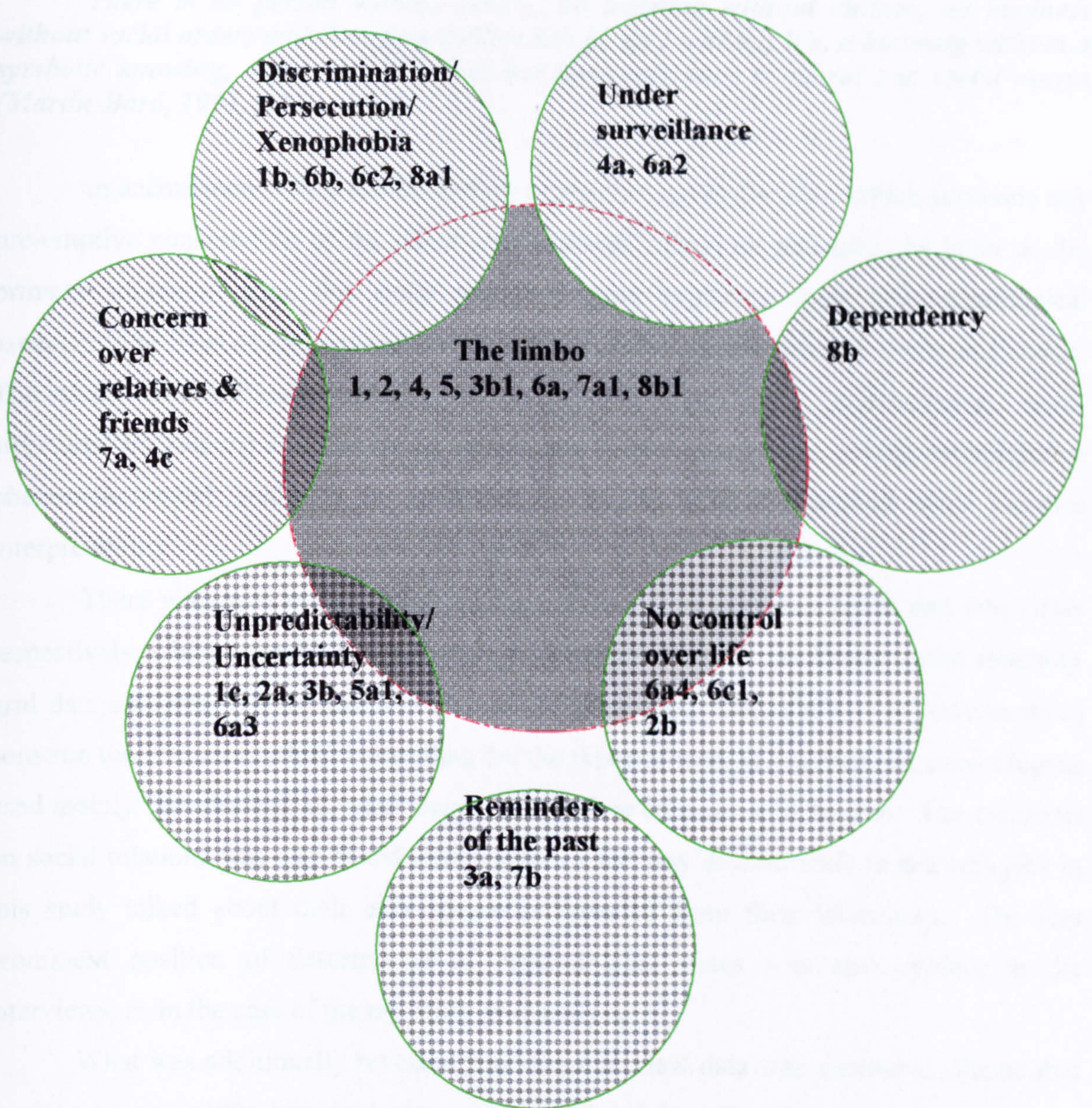
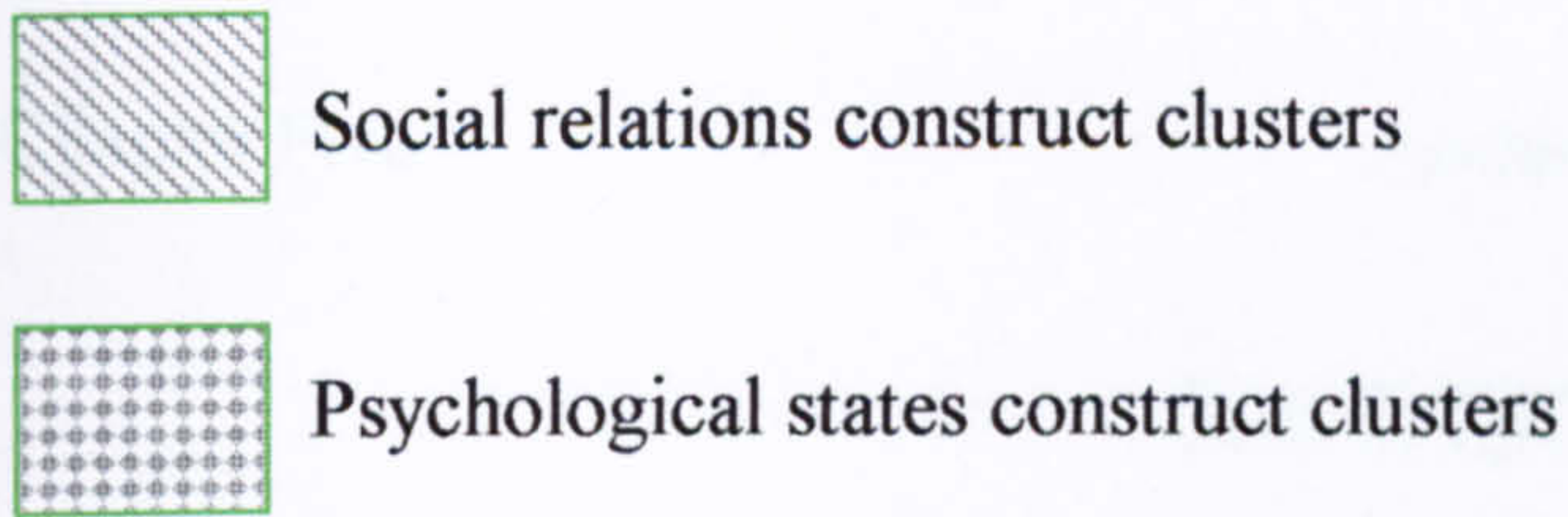


Figure 5.7: Diagrammatic representation of the relations between the construct clusters

5.4. DISCUSSION

There is no person without family, no learning without culture, no madness without social order; and therefore neither can be an I without We, a knowing without a symbolic knowing, a disorder that does not have reference to moral and social norms (Martín-Baró, 1994, p.41)

In accordance with a Kellian notion of psychological disorder, which suspends any pre-emptive construction of the client's problematic behaviour and uses the latter as the primary source of data, this study embarked upon exploring some phenomenological aspects of the lives of traumatised asylum seekers and refugees currently living in London. The study used different research instruments (repertory grids, questionnaires, semi-structured interviews) and theoretical approaches (personal construct theory, interpretative phenomenological analysis) in an effort to assist triangulation and thus increase interpretability.

There were two main sets of results, deriving from repertory grids and interviews respectively, which seem to support and complement each other. In summary, the repertory grid data revealed that asylum seekers and refugees used "social relations" constructs to construe their traumas while, controlling for the types of trauma experienced, non-refugees used mainly "psychological states" constructs in their construing of trauma. The emphasis on social relations was also found to characterize the way asylum seekers and refugees in this study talked about their experiences as revealed from their interviews. The less prominent position of descriptions of psychological states was also evident in the interviews, as in the case of the repertory grid analysis.

What was additionally revealed from the interview data was a construct/theme that seem to occupy an "in between" space amid the "social relations" and the "psychological states" constructs/themes, namely "the limbo". The limbo (see Figure 5.7) seems to have a central, orchestrating, role in the participants' narratives of their personal experiences. It seems to be part not only of the social and the personal/psychological space but also to occupy a temporal dimension within which very often the lives of asylum seekers seem to exist. As one of the participants in this study put it: "limbo is the time, P3".

Considering the centrality of the limbo experience among asylum seekers and refugees, as revealed in this study, the dearth of relevant literature within psychology seems surprising, to say the least. A search in the PsycINFO and PubMed databases produced no results when the combined terms “asylum seekers” and “limbo” were used while only two articles were found when using the terms “trauma” and “limbo” together. One of the relevant articles (Luebben, 2003) only touches upon the topic while placing its main onus on the so-called “testimony method” used in Germany with refugees from Bosnia. The other article (Markowitz, 1996) describes a particular kind of limbo, created for Bosnian refugees in Israel, which seems to offer an alternative way of hosting refugee populations, the effects of which seem to be mainly positive. What Markowitz offers is a challenge to an uniformly negative conception of limbo within contemporary discourse and a shifting of attention to its social parameters which emphasises social policy as the determining factor in the kind of effects that limbo could potentially have on refugee populations.

What seems to be absent in the existing limited psychological literature is a conceptual framework within which the psychological, social, temporal and other parameters of the limbo experience among asylum seekers and refugees could be analysed and explained. This study will attempt to provide a conceptualization of limbo by looking beyond the field of psychology. Specifically, the concept of liminality, developed within the discipline of social anthropology, will be adopted in order to provide the needed conceptual structure for further illuminating the concept of limbo.

5.4.1. The liminality metaphor as exegesis

Etymologically speaking the terms “limbo” and “liminal” could be seen as intersecting. Liminal, deriving from the Latin word “limen” meaning “threshold”, has the additional meaning of something being barely perceptible. Limbo, on the other hand, expresses the same meaning, within the context of Roman Catholic theology, of being placed in a threshold-like position. Additionally, it expresses a state in which something is left in oblivion and also, as in the case of liminal, it refers to something which is marginal and barely perceptible.

The term “liminal phase” was first used by the anthropologist Arlond van Gennep (1909/1960) in order to describe a certain stage within the ceremonial rites of passage

“which defined as rites which accompany every change of place, state, social position and age” (Turner, 1969, p.94). According to van Gennep every rite of passage is characterised by three phases: i) separation; ii) margin (or limen, from the Latin for threshold); iii) aggregation. During the liminal phase “the characteristics of the ritual subject (the “passenger”) are ambiguous; he passes through a cultural realm that has few or none of the attributes of the past or coming state” (Ibid). The present analysis is based on the concept of liminality as it was further advanced by the British anthropologist Victor Turner (1969) and since then has been applied within a range of disciplines such as literary theory, theories of postmodernity, and analysis of films, to mention just a few.

A number of parallels could be drawn between the liminal phase in rites of passage and the limbo position experienced mainly by asylum seekers but to a great extent also by refugees. The mainly transitional nature of the asylum process means that asylum seekers enter a new cultural realm, that of the host country, which has none of the attributes of the past or the coming state, as mentioned earlier. Liminality and limbo both refer to the condition of being “neither here nor there”, a state of being in “betwixt and between the positions assigned and arrayed by law, custom, convention, and ceremonial” (Ibid, p.95). During this phase the ritual subjects (people seeking asylum) are given new names (asylum seekers) to denote the “no longer/not yet” status and are “deprived of rank, status, and property” (Ibid). This in betwixt and between area is a region of ambiguity and uncertainty, experienced by asylum seekers themselves (see Figure 5.7), and also a realm of taboo for tribal as well as contemporary post-industrial cultures. The phenomena of xenophobia, racism, and discrimination experienced by asylum seekers (Figure 5.7) today in Western world countries could be seen as expressions of such social taboos. The ambiguous and indeterminate status of liminal entities has usually been linked to a rich variety of symbols expressing death, invisibility, darkness, wilderness etc. In this context, phenomena such as the “bad press”, usually surrounding asylum seekers in contemporary Britain, could be explained as an expression or symbolization of liminality.

In order to have a complete picture of what liminality is we must ask the question, rather in the fashion of Kelly (1955) and of structural anthropologists like Levi-Strauss (1963), of what is the opposite of it, treating it in this way as a construct as this has been traditionally defined within personal construct theory.

5.4.2. Liminality as a construct

Liminality has been linked, especially in the work of Turner (1969), with a blend of characteristics including, amongst others, lowliness, homogeneity and comradeship. These characteristics are shared by people entering the liminal phase in rites of passage. Liminal people, such as neophytes in initiation or puberty rites, normally behave passively or humbly and must observe their mentors and accept often arbitrary punishment without being allowed to protest or complain. It is during this phase that a bond between the liminal people starts developing along with “an intense comradeship and egalitarianism” (Ibid, p.95). This bond develops a type of society “as an unstructured or rudimentarily structured and relatively undifferentiated *comitatus*, community, or even communion of equal individuals” (Ibid, p. 96., italics in the original text) which Turner names as *communitas* by adopting the term, with a different meaning, from P. Goodman (Goodman & Goodman, 1947). *Communitas* or anti-structure, as Turner also names it, relates to liminality, marginality, inferiority and equality (Turner, 1969, 1974).

Communitas could be seen as the end product of a psychological process, taking place among the members of a liminal group, which was described by Kelly (1955, p.90) in his ‘Commonality Corollary’: “To the extent that one person employs a construction of experience which is similar to that employed by another, his psychological processes are similar to those of the other person”. While within the well defined structures of rituals and other forms of liminal existence *communitas* is an integral part of the whole process there are, however, instances of liminality where *communitas* fails to occur (e.g. asylum seekers being dispersed in host countries). In these instances, commonality does not take place among the group members and as a result the protective influence of *communitas*, as will be explained later, is also absent, with usually detrimental effects upon the individuals.

Could there also be a ‘Liminality Corollary’ which, unlike Kelly’s ‘Commonality Corollary’ emphasizing individuals’ construing, would alternatively place more emphasis on construing at a socio-cultural level by maybe declaring: To the extent that a society fails to engage some of its groups within its own construal processes then the society may play a role in alienating these groups (accepting this corollary is of course optional!). Winter, Patient, and Sundin (2005) have theorized that alienation, or else ‘cultural estrangement’,

“may be viewed in personal construct terms as a perceived profound lack of commonality between one’s construing and that of one’s primary social group” (p.8). In that sense commonality and liminality could be seen as the opposite poles of a construct.

All these characteristics constituting liminality define the passage from lower to higher which is achieved “through a limbo of statuslessness” (Turner, 1969, p.97). This passage or movement also helps define the opposite pole of the construct of liminality, which, according to Turner, relates to society, structure, power, and hierarchy among others (see Table 5.9). The number of constructs included in Table 5.9 could be considerably larger if different types of liminality were taken into account.

Table 5.9: Some binary oppositions defining the construct of liminality.

LIMINALITY		STATUS SYSTEM
Communitas		Society
Anti-structure		Structure
Marginality		Mainstream
Inferiority		Superiority
Statuslessness		Status
Equality		Hierarchy
Passivity		Activity
Comradeship		Roles
Egalitarianism		Inequality
Absence of property		Property

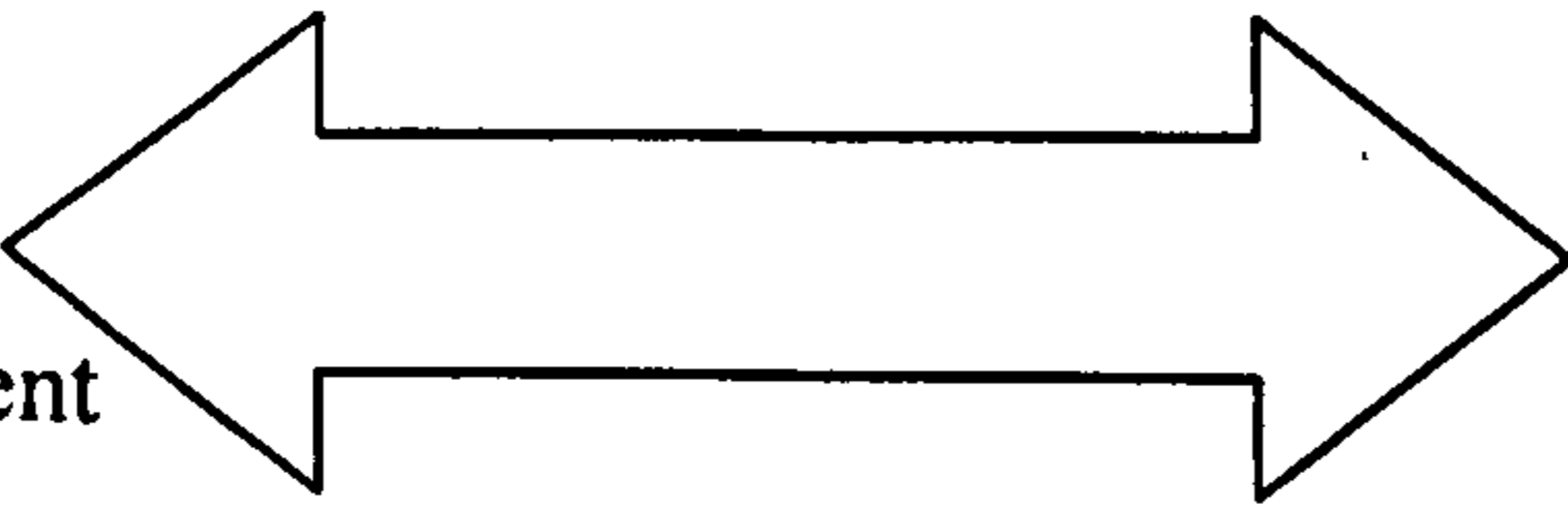
One unexpected, and so far unaccountable, finding of this study was the fact that the refugee group used a considerably larger number of constructs expressing social relations in their construing of trauma when compared to non-refugee groups (Figure 5.6). Avoiding potentially essentialist accounts, that would emphasize differences between Western and non-Western populations, a possible explanation for such a finding could be that what really makes the difference is not an emphasis on social relations per se in the refugee group, but, actually the expression of liminality through the idiom of social relations in that group. In other words, what differentiates the refugee from the non-refugee group is the former’s experience of being in limbo and having the sense of living at the margins of society, which is a feeling that for most participants was a common experience in both their native as well as host country. Reconsidering the social-relations constructs expressed by the refugees and asylum seekers in this study (see Tab. 1, Appendix C) we can see that a

substantial number of them (see Table 5.9) could be regarded as expressions of liminal living.

5.4.3. Liminality/Limbo as prophylaxis

During the liminal phase of rituals ceremonial rules ensure that the participants are protected from the rest of the society. As Turner observes, “from the perspectival viewpoint of those concerned with the maintenance of “structure”, all sustained manifestations of communitas must appear as dangerous and anarchical, and have to be hedged around with prescriptions, prohibitions, and conditions” (1969, p.109). The same ceremonial rules seem to provide such a protection to the participants by allowing for a sense of community or comradeship to develop among them. The sense of belonging to a community of equals helps create group solidarity and also acts as a boost to the members’ morale. Thus, liminality through communitas can function prophylactically for the members of a liminal group.

Table 5.10: The expression of liminality and limbo through some social-relations constructs used by the asylum seekers and refugees of this study to construe their traumas.

LIMINALITY		SOCIETY
Abandonment		Being cared for
Brainwashed		Freedom to choose
“Big brother”		Free society
Police mistreatment		Treated with respect
Lonely		Not lonely
Violence		Happiness
Humiliation		Not humiliated
Loss		
What people shouldn’t do to each other		What people should do

It is usually the case that host countries fail to create the necessary protective environment for asylum seekers because of social policy measures which do not allow for what Turner described as communitas to form among them. Recent studies stress the damaging psychological effects that the so-called post-migratory factors, such as loss of

community, disrupted social networks, poor housing, unemployment etc, have on the well-being of asylum seekers and refugees (Schweitzer et al, 2006; Silove et al 1997).

There is, however, one study (Markowitz, 1996), mentioned earlier, that provides evidence regarding the potentially protective nature of liminality and limbo when *communitas* is created and encouraged through social policy. Markowitz (1996) studied a small Bosnian Muslim refugee community, consisting of eighteen families, in Israel. This small community had “no intention of transferring their citizenship or identification from Yugoslavia to Israel or of creating a home there...instead they consider it of utmost importance to continue to live as guests in a foreign land until the moment that they can return to their historical home – their native towns and villages in Bosnia” (Ibid, p.127). Markowitz contrasts the life arrangements of these Bosnian refugees, living in an Israeli kibbutz, to the barracks-like setting of Croatia and Hungarian refugee camps, where people usually complain about staying idle and having nowhere to go. As he explains, the social policy in Israel is such that the Bosnian refugee families are all provided with their own apartments, the State pays for the house bills, and all refugees are also given steady jobs so that “there is no sense of State dependency or attached feelings of inefficacy and malaise” (Ibid, p.129). Markowitz concludes that this example of Bosnian refugees living in Israel shows that “not all displaced persons are eager to establish a new home. Indeed living in limbo – if secure and family-based – can enable refugees to restabilize their identity, shore up their resources, solidify family roles and relationships, and reassemble their feelings of self-worth and personal efficacy before moving onto more long-term decision-making” (Ibid, p.132).

The above findings seem to be in accordance with refugee literature regarding issues of acculturation. It has been found, for instance, that levels of acculturation were significantly negatively correlated with levels of PTSD (Spasojevic, Heffer, & Snyder, 2000). In another study (Nicholson, 1997) the following acculturation tasks were found to have the strongest overall predictive power for mental health: seeking employment, rebuilding social supports, redefining roles and learning a new language. Acculturative tasks such as learning the host language, however, could not be an issue within refugee arrangements such as those described in the Markowitz study since refugees in this case do not wish, or, are not planning to reside in the host country permanently.

All the issues that emerged in the present study as the constituent parts of limbo (see Figure 5.7) will be further analysed here by connecting them with the existing literature. The presentation of the issues will follow their categorization, as presented in the analysis, into: i) Social relations issues and ii) Psychological states issues.

5.4.4. Social relations issues

Social relations emerged as the most prominent category in the construing of life experiences among the asylum seeker and refugee participants in this study in both the repertory grid and interview data. It seems that, although issues relating to psychological states can readily be identified by the use of psychiatric symptom checklists, the endorsement of the symptoms from the participants, however, does not “necessarily mean that these symptoms have a salient meaning for survivors” (Kagee & Naidoo, 2004, p.55). Repertory grid analysis in this study has already shown that, in terms of superordinancy measures, trauma seems to occupy a secondary position when compared to the current social issues concerning the lives of the participants, a common finding in other studies too (Steel et al, 2002). Similarly, for some South African political prisoners “detention itself may not be construed as the most traumatic but rather subsequent changes in family functioning, inability to find employment etc” (Ibid, p.53). For Vietnam veterans also “homecoming stress was the most significant predictor of current PTSD symptomatology superseding combat exposure, childhood and civilian traumas and stressful life events” (Johnson et al, 1997, p.259).

It is interesting to notice here that, although the PTSD diagnosis was established as a psychiatric disorder mainly as a result of the political pressure surrounding the war in Vietnam it was nevertheless the first psychiatric diagnosis relating to war trauma that actually did not concern the inability of the soldiers to fight in the war theatre (cf. earlier war related diagnoses such as soldier’s heart, shell shock etc) but rather it concerned their failure to adapt to civilian life after their homecoming. This in itself proves the importance of the “post-traumatic”, social, factors in the disorder’s prognosis.

Several studies have already addressed the issue of putting far more emphasis on psychological constructs in the PTSD diagnosis and ignoring the importance of social dimensions. Some authors, for instance, have stressed the fact that the PTSD diagnosis

ignores the issue of functionality, although it is a common finding that the ability of people to fulfil social roles reduces the severity of psychological distress (Kagee & Naidoo, 2004; Steel et al, 2002). Gorst-Unsworth (1992) suggested that if “standardized measures of social function were included in the concept of PTSD this would increase its usefulness in relation to severe and long-term trauma” (p.167-8).

Kelly (1955) expressed the importance of the social world for the individual when he pointed out that it is the society that provides all the validation contexts for our most important constructions: “...the expectancies which are common to the group actually operate as the validators against which the individual tends to verify the predictive efficiency of his own constructs (Vol. 1, p. 176). Within personal construct theory, Button (1983) pointed out that “the locus of the problem for the psychologically disordered is in the social context particularly as this relates to self-construing” (p.319). Leitner elaborated Kelly’s Sociality corollary (Leitner 1985; Leitner & Phenninger, 1994) and talked about the importance of what he called ‘ROLE relationships’, referring with this term to intimate interpersonal relationships which he regarded as “an avenue for meaningfully encountering the world” (Leitner, Begley, & Faidley, 1996, p.327).

All the social relations categories emerging from the interview analysis are individually presented and discussed below:

Discrimination/Persecution/Xenophobia

The first thing that needs to be stressed is that the issues involved in this category are many and complex. It would be theoretically useful to distinguish between actual discrimination, which is usually related to different forms of persecution and harassment, and what is referred to in the literature as perceived discrimination (e.g. Mays, Cochran, & Barnes, 2007) which refers to the anticipation of being treated badly or unfairly (Kessler, Mickelson, & Williams, 1999). Asylum seekers have very often experienced both types of discrimination, as in the sample of the present study, and research has shown a connection between chronic types of discrimination, such as racism, and an array of psychophysiological responses and changes in brain functioning (e.g. Clark, 2003).

Actual and perceived discrimination have been shown to relate to a heightened surveillance for negative social cues (Mays, Cochran, & Barnes, 2007) that can presumably

function as a maintaining factor for many PTSD symptoms through the shifting of attention to, or the creation of new, negative personal schemata. As McFarlane, Weber, and Clark (1993) pointed out, the brains of traumatised people stop attending to neutral stimuli and as a result do not take in new information because they only process and pay attention to threatening stimuli. This results in lack of engagement with the world and consequently life loses its meaning.

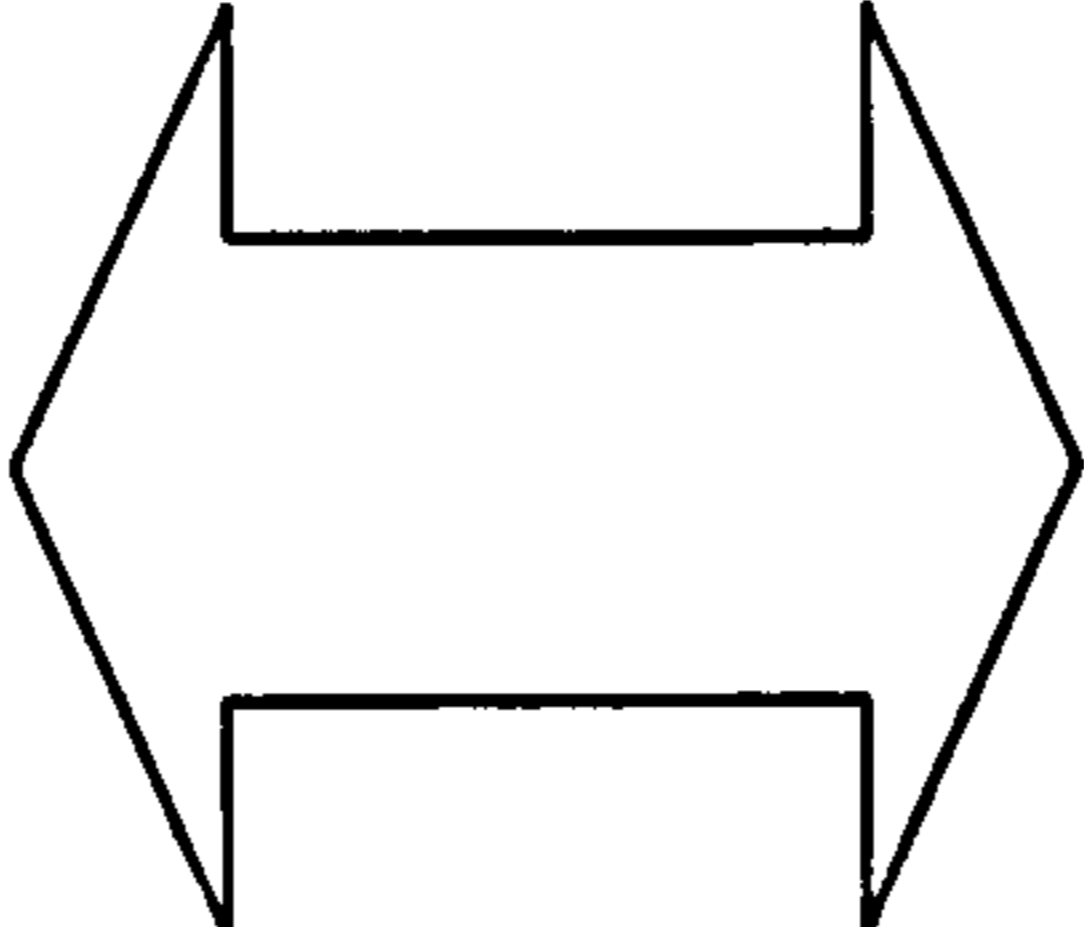
Even mild forms of discrimination, such as everyday sexism in the workplace, have been shown to have a moderately strong relationship with PTSD, expanding in this way the definition of traumatogenic events (Berg, 2001). As Kessler et al (1999) point out “the associations of perceived discrimination with mental health are comparable in magnitude to those of other more commonly studied stressors, and these associations do not vary consistently across sub-samples defined on the basis of social status”(p.208).

Actual forms of discrimination, such as political persecution, have been reported to have a traumatic impact on parents and their children, indicating the possible transmission of trauma to the second generation (Chin, 2004). Perceived and actual discrimination in the participants of this study was also found to be linked with social isolation experienced in both their native county as well as in London. In the majority of cases social isolation came as the result not of a personal choice but rather as the result of other people’s avoidance of them. As Winter et al (2005) observe “this may be because others experience anxiety as a result of their difficulty in construing the construction processes of the individual, who is consequently unpredictable” (p.6).

Such a view is potentially supportive of the liminality metaphor/hypothesis, put forward earlier, which stated that very often marginalised/liminal people are perceived as different and strange from the mainstream society, encouraging in this way their members to construe them as unpredictable and, as one might say, unconstruable. Such a view probably removes part of the emphasis on the individual and psychological processes (e.g. anxiety in its Kellian definition) and put more emphasis on construing at a socio-cultural level. This study can reveal such a socio-cultural construing, which is multileveled and complex, taking place in contemporary Britain. According to participants, asylum seekers and refugees are usually construed by the mainstream society as being the same as unauthorised economic immigrants, British non-white minorities and also terrorists,

especially after the 9/11 terrorist attack on the U.S.A. On the other hand, the participants in this study mainly spoke positively about the British people in general and their complaints seemed to focus rather on some specific groups, such as teenagers and the media, and also on incidents of racist behaviour perpetrated towards them by non-White British. As can be seen from Table 5.11, the latter seem to occupy a place in both groups, the liminal and the mainstream. Such a position could potentially have a conflictual impact on the members of this group that would be worth studying.

Table 5.11: An aspect of construing asylum seekers and refugees in contemporary Britain as revealed from the present study. The plus and minus signs indicate positive and negative relations respectively between asylum seekers/refugees and mainstream groups.

LIMINAL PEOPLE		MAINSTREAM SOCIETY
(treated as one group)		
Asylum seekers		The Media (-)
Refugees		Groups (e.g. teenagers) (-)
British non-Whites		British non-Whites (-)
Illegal economic immigrants		The general public (+)
Terrorists		

Under surveillance

There is an absence of psychological literature concerning the effects of surveillance that asylum seekers very often experience in their home countries and also in their country of reception, although the former type differs, at least in principle, from the latter. Surveillance taking place in the country of origin is usually a form of persecution while when it is applied in the host country its main purpose is that of management. However, the pressure that the latter type is having on asylum seekers has been noticed (Gastelaars, 2002), although its exact effects still remain unknown. The present study has shown that the participants perceived being under surveillance in their home countries as traumatic and that this experience continues to produce negative affect in the present mainly through association.

The only available literature that could possibly throw some light on the psychological effects of surveillance is the research on stalking. However, comparisons between the two should be made cautiously since, first, considerable differences could be found between the two phenomena and, second, there is still not an agreed upon definition of stalking.

Stalking has been found to cause a range of psychological disturbances in its victims including anxiety, intrusive recollections and flashbacks, nightmares, appetite disturbances, depressed mood and suicidal rumination. In a sample of one hundred victims of stalking 37% fulfilled the criteria for PTSD (Pathe & Mullen, 1997). Stalking has also been reported to lead to the development of maladaptive schemata such as attributions of self-blame, decreased trust in other people and feelings of alienation and subsequent social isolation (Kamphuis, Emmelkamp, & Bartak, 2003). It has been found that, in the case of stalking, violence does not need to be present for symptoms of PTS to develop, indicating in this way that “it is not the violence alone that accounts for psychological problems among stalking victims” (Ibid, p.153)

Dependency

Since asylum seekers do not have the legal right to work they have to rely on government support and help from friends and relatives. Those who manage to acquire a refugee status may still not be able to support themselves if physical and mental health problems or absence of relevant qualifications prohibit them from getting a steady job. As shown in the analysis, dependence on social services helps sustain depressive symptoms among some of the participants. An inverse relationship between dependence on welfare and psychological well-being was found among southeast Asian refugees in the U.S.A., and, among the same people financial dependence seemed to bring shame and loss of face to individuals and also to their families (Chi-Ying Chung & Bemak, 1996). Among asylum seekers in Australia barriers to work were found to be a major source of stress (Sinnerbrink et al, 1997). The perspective of the authorities and the general public, however, seems to be quite different and “refugees are usually seen as persons who use tricks to access resources” (Salis-Gross, 2004, p.162). Such conceptions usually are the result of a type of

construing, described in Table 5.9, that takes place at a societal level and seems to confuse asylum seekers with refugees and other socially marginal groups.

Concern over relatives and friends

As shown in the analysis, concern over relatives and friends seems to be a constant issue in the lives of the participants, fuelling their feelings of anxiety and depression. As it was found to be the case in this study, missing persons are usually the cause or part of the original trauma and their continuing absence means that the trauma remains unresolved and psychologically current in the participants' lives. Apart from that, the social network of family and friends as supportive agencies occupies a prominent place within the refugee literature.

A distinction, however, has been made between the effects of support coming from the family and the ethnic community of a person living in a host country as an asylum seeker or a refugee, on the one hand, and the social support from the wider community. In a study of Sudanese refugees in Australia it was found that the former type of support, that of family and the ethnic community, was "a significant determinant of mental health functioning" while the latter, wider social community, was not (Schweitzer et al, 2006, p.185). Support specifically coming from family and peers was also found to have a significant main effect on Khmer adolescents' level of PTSD, depression, and personal risk behaviour (Berthold, 1998). Other studies talking about social support in general have also emphasised its inverse relationship with psychopathological disturbances in refugees (Ghazinour, Richter, & Eisemann, 2003; Holtz, 1998). Finally, a study by Gorst-Unsworth and Goldenberg (1998) has found that social support predicts depressive morbidity more strongly than trauma factors and pointed out the therapeutic effects of rehabilitation that focuses on social support and family reunion.

5.4.5. Psychological states constructs

In the last part of this discussion the psychological states constructs revealed in the interview analysis will be presented and linked with relevant psychological literature:

Unpredictability/Uncertainty

The feelings of uncertainty and the inability to plan or predict the future are well known problems among asylum seekers and refugees (De Vries, 2001). The present study revealed that this construct appeared to have both, a superordinate and a subordinate relation with the Limbo master construct cluster which suggests their similar nature and their strong interconnectedness. An alternative graphic representation of the two constructs (cf. Figure 5.7) could be the depiction of the Unpredictability/uncertainty construct as being completely engulfed by the Limbo master construct cluster as in Figure 5.8.

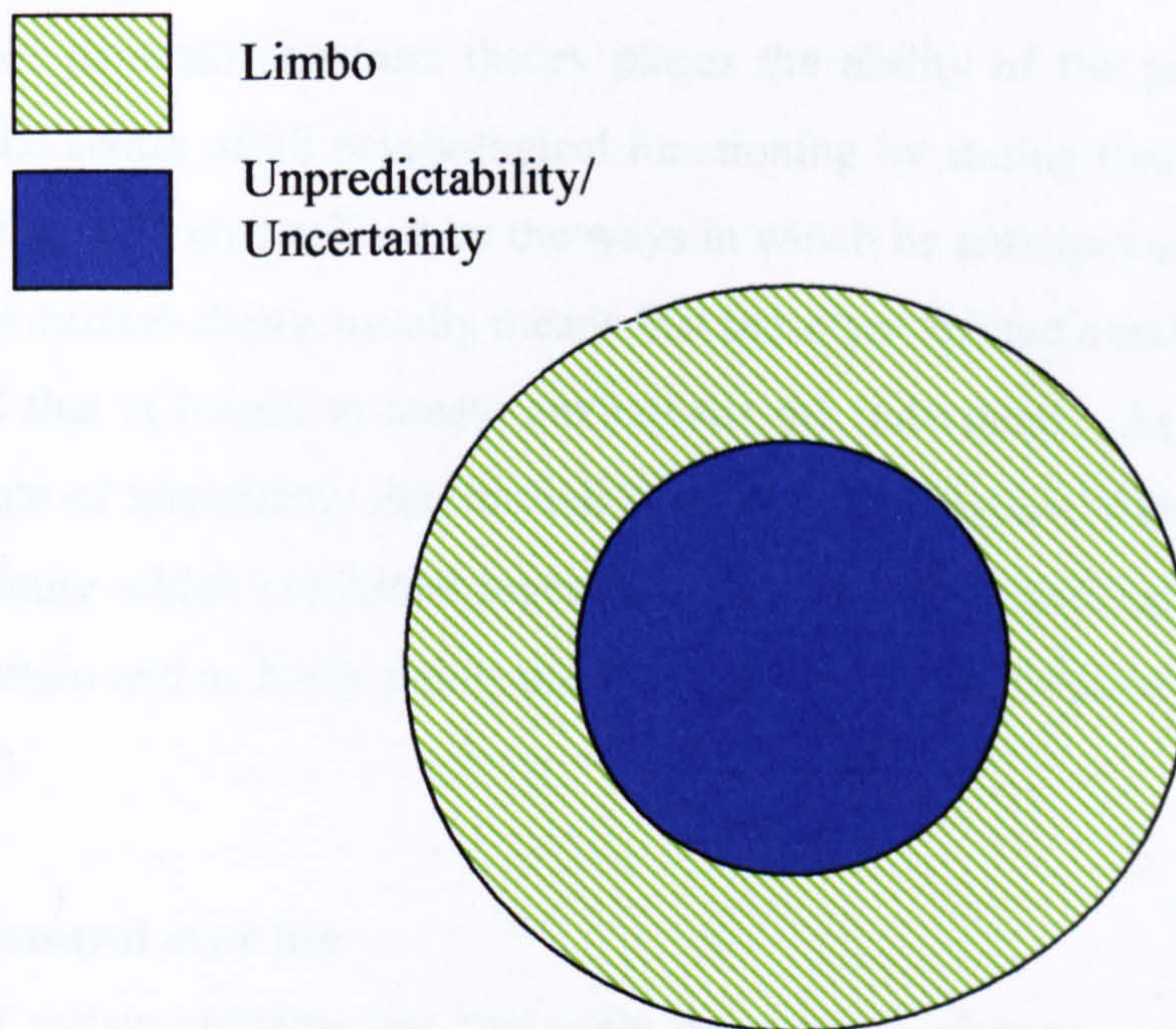


Figure 5.8. An alternative depiction of the relationship between the constructs of Limbo and Unpredictability/Uncertainty (cf. Figure 5.7)

If the above version were adopted then the contribution of psychological states to the overall construing of the participants would appear even more impoverished and minimal. Supporting this position would seem to be a number of studies in which the construct of uncertainty is discussed as a problem deriving from mainly social factors. For example, in their article Becker, Beyene, and Ken (2000) talk about uncertainty experienced among Cambodian refugees living in the U.S.A as a problem resulting from changes in the welfare system of their host country. Malley-Morrison (2005) criticizes

Western workers helping refugees as they tend to focus on trauma as an internalized problem and by doing so they give inadequate attention to issues such as unemployment, housing and uncertainty as to whether they will be able to stay in the country. In this way uncertainty is removed from the psychological sphere and gets attached to tangible social and every day issues facing refugees.

Within personal construct theory it is widely accepted that all disorders can be regarded as attempts to deal with invalidation and to avoid uncertainty particularly, as Button (1983) stresses, within the context of social relations. Kelly's (1955) 'Fundamental Postulate' of personal construct theory places the ability of the person to anticipate and predict at the centre of all psychological functioning by stating that "A person's processes are psychologically channelized by the ways in which he anticipates events"(p.47). Failure to anticipate certain events usually means that these are located outside a person's construct system and that is bound to create anxiety for the individual. Asylum seekers live in a constant state of uncertainty due to their legal status, and also, their lack of knowledge of the host culture which combined together make prediction hard to achieve. Their future seems uncertain and as Kelly points out "it is the future which tantalizes man, not the past" (1955, p.49)

No control over life

This construct/theme has two main referents as already explained in the analysis. First, it refers to the inability of the participants to predict and plan the future, which has already been analysed above. Second, it relates to a sense of powerlessness emanating from feelings of being ignored and undervalued within the host society.

A study of refugees in Sweden has found that a poor sense of control over one's life is a psychological risk factor for psychological distress of greater importance than exposure to violence before migration (Sundquist, et al, 2000). A sense of feeling undervalued and ignored could be seen as the result of what Turner (1969) named as "a limbo of statuslessness", mentioned earlier in the discussion, that usually accompanies asylum seekers and refugees in the host society. Having no right or the ability to work and provide for themselves and their families, asylum seekers could be perceived by others as social parasites or think of themselves in similar terms.

Since, according to Kelly (1955), the society is the most important validator of most psychological construing, we can see how a disempowering social discourse that describes asylum seekers and refugees as social pariahs can potentially have an invalidating impact on that population, adding in this way to their psychological distress. Leitner et al (1996, p.330) defined power, in personal construct terms, as “the ability to act as validating agents for others (i.e. the ability to influence the construction processes of others)”. In that sense, they further theorised that “social groups who possess less power in creating the meaning of the culture can be thought of as marginalized persons” (Ibid).

The personal construct theory’s emphasis on society as the major validator/invalidator of personal construing and its subsequent creation of conditions of power and powerlessness agree with social constructionist views on the topic. A feminist perspective on psychological distress, for example, applies similar notions of power as social construction (see Foucault, 1980) and “strains to keep away from the notion of disorder in the individual” (Brown, 2000, p.300). The feminist call to diagnose cultures instead of people as pathological could be seen as having a political as well as a scientific grounding.

The feminist slogan, “The personal is political”, instantaneously defines and at the same time legitimizes the political aspect of its argument. In that respect, feminists by criticizing the current conceptualizations of psychiatric diagnosis, as disempowering for the individuals concerned, propose political action taken within and outside academia (e.g. funding research that gives voice to the powerless and marginalised in the society, lobbying for new legislation that protects social minorities etc). In a similar vein, personal construct theorists support emancipation of the powerless by stressing, for example, that individuals have some choice regarding the granting of power to validating agents of their own preference (Leitner et al, 1996). Also, Epting et al (1996), by regarding the power/powerless distinction as a construct, point out that people who construe themselves in the latter term have the choice of employing alternative constructs to define themselves and their relationships.

On the other hand, the feminist call for diagnosing cultures rather than people can be seen as having grounding in epidemiological research. Landrine (1988) points out that by placing diagnosis within its epidemiological context it becomes obvious that certain

kinds of distress are found among particular social groups. If, as already described, asylum seekers are more likely to get diagnosed with PTSD whereas schizophrenia is more commonly ascribed to refugee populations, it becomes evident that certain social factors are at play in accounting for these differences. This is more so when we take into account that the prevalence of the diagnosis of schizophrenia among refugees does not seem to exist in countries such as Australia and the U.S, where their mainly immigrant culture is thought to function as a protective psychological factor for foreign populations.

Reminders of the past

This is the only construct/theme which unlike all others is not connected to the master construct cluster of Limbo. Its main reference is to the past and for that reason it is probably the only construct that relates directly to the original traumatic experiences. Unlike the other two constructs describing psychological states, which mainly refer to the future, and the ones describing social relations, which mainly concern the present, this construct can be seen as instrumental in keeping the traumatic past psychologically current. It has been observed that traumatized people are “triggered” by internal or external reminders of the original trauma (van der Kolk, McFarlane, & Weisaeth, 1996). As shown in the analysis, very often safe and harmless objects, people, or situations can function as reminders of trauma that can cause immense psychological distress to individuals. Compounding the problem is the finding, mentioned earlier, that traumatised people tend to attend and process mainly negative stimuli in their environment (McFarlane, et al, 1993).

5.4.5. Summary

The results from the analysis of repertory grids and semi-structured interviews were discussed in relation to general psychological literature with specific reference to personal construct theory. The concept of “Liminality” was borrowed from the field of social anthropology, as specifically developed by Turner (1969), in order to account for the construct/theme of “Limbo”, which occupied a central position in the analysis of the interview material.

The concept of liminality was thought as offering a needed social dimension in the interpretation of the results, which had already revealed the prevalence of social over psychological factors, and it also provided a fertile theoretical ground for connections to be made between the fields of structural anthropology, in particular, and personal construct theory. The finding that the asylum seeker and refugee population differed from a non refugee comparison group in the way they construed their traumas was thought to express the liminal status of the former group.

Avoiding any essentialist account that would regard Westerners as generally different from non Westerners, this study proposed that the social relations constructs used by the refugees were not just an expression of their greater preoccupation with social relations in general, but rather, that the social relations constructs were in fact an expressed idiom of liminality. In that respect, liminality, marginalization, social alienation and other similar social conditions can be thought as being instrumental in initiating and perpetuating individual trauma. Referring to the same issue, some writers have used the term psychosocial trauma (Martin-Baro, 1989) in order to stress that although the trauma manifests itself individually it should nevertheless be regarded as the product of inhuman relationships. The latter author eloquently expressed this idea by saying that “personal...is the dialectical correlate of the social and as such, incomprehensible, if its constitutive referent is omitted...there is no disorder that does not have reference to moral and social norms” (Martin-Baro, 1994, p.41).

Finally, the study indicated that individual construing can be seen as compatible with that taking place at a socio-cultural level since both can be expressed through personal constructs (in personal construct theory terms) or binary oppositions (in social anthropological terms).

Chapter Six: General Discussion

“Scientific progress is marked more by questions than by any accumulation of answers” (Mahoney, 1974, p.7)

6.1. A review of the main findings

A repeat of the opening statement of this thesis seems most appropriate here: “Trauma research...has so far generated more questions than provided answers to the chronic issues surrounding the understanding and conceptualisation of the effects of traumatic experiences on people’s lives”. Although the original aim of this thesis was to build upon existing knowledge it, nevertheless, ended up mainly questioning established models and ways of thinking about trauma, proposing at the same time some radical alternatives. Summarizing here, the following points describe the main contributions to knowledge.

First, it was shown that the main hypothesis on which Sewell et al (1996) based their personal construct model of PTSD, namely the supposed under-elaboration of the traumatic event, was the product of flawed assumptions. The author proposed a new method of estimating the degree of elaboration of conceptual structure, which provided a solution to the aforementioned shortcomings. In exact opposition to Sewell et al’s (1996) findings, the present thesis found that trauma appears to be comparatively more rather than less elaborated within a PTSD patient’s conceptual structure. The TUCKER-HICLAS software, used here for the first time in the analysis of repertory grids, provided the additional measure of “strength of association” between the trauma event and its construct classes. The measure revealed that trauma is more strongly associated with its construct classes than the non-traumatic events are with their own classes. Another measure of elaboration, that of “conflict” as estimated via GRIDSTAT, further supported the above results since it showed that the traumatic event had more conflict attached to it and thus was more elaborated than the rest of the events. Finally, GRIDSTAT’s superordinancy measures provided additional support by revealing that trauma appeared as superordinate, and thus more elaborated, in the majority of the cases.

All the above evidence led to a rethinking of the basic premises not only of the personal construct model's conceptualization of trauma but of all the established models of PTSD which are based on the notion of trauma as the result of unelaborated and fragmented memories. The author presented evidence from newly published research, which is diametrically opposed to the notion of trauma memory as qualitatively different from everyday memories and trauma as the product of un-integrated and incoherent narratives. This thesis supported the so-called "landmark view" (e.g. Bertsen et al, 2003), or else "equivalency/superiority view" (e.g. Porter & Birt, 2001), of trauma according to which traumatic memories become reference points for the attribution of meaning to less distinctive experiences increasing in this way negative implications as well as expectations for the rest of the person's conceptual structure.

Based on the above conceptualizations and data from the current investigation the author proposed a new personal construct model of PTSD, which is based on the following sequence of the individual's construal choices (see also Figure 2.12): i) some aspects of the trauma event lie outside the range of convenience of the person's construing; ii) as a result anxiety is experienced; iii) the person starts elaborating, explicitly or implicitly, the traumatic experience by choosing among alternative constructions available to him/her at the time (choice corollary) in order to elaborate his/her system and thus avoid further anxiety and threat; iv) the "trauma paradox": while the person elaborates the trauma event in order to increase prediction and anticipation and thus avoid anxiety and threat, his/her specific construal choices mean that trauma gets elaborated on negative premises (e.g. it was my responsibility/I am to blame/the world is unfair etc), which increase rather than reduce negative psychological implications (e.g. anxiety, threat); v) trauma becomes superordinate/over-elaborated with the resulting continuous negative implications and anticipations within the individual's conceptual structure; vi) two process-related repertory grid measures: 1) Reduction in the elaboration of the overall conceptual structure (symptoms of re-experience and avoidance); 2) Tight construing (symptoms of arousal and depression); vii) one content-related repertory grid measure: Negative valence (symptoms of re-experience, anxiety, intrusion); viii) only within the process-related repertory grid measures there were found to be gender specific effects (women were found to be generally more vulnerable than men). Both genders were found to be commonly affected by the content characteristic (i.e. negative appraisals), which supports its prominence within current models of PTSD (e.g. Ehlers & Clark, 2000).

Although the above model was presented in a step-wise and linear fashion, that was done mainly for the purpose of presentation and clarity. The model does want to emphasize though, in the exact reverse order to Sewell et al's (1996) model, that anxiety precedes threat and not vice versa. The author wants to emphasize that feelings of anxiety, initially experienced during and after the trauma, are a normal response to stress. Trauma becomes pathological only after a protracted period of experienced anxiety, leading to certain construal choices, results in a sense of current threat. The process that leads to the establishment of the sense of threat comes as a result of the individual's efforts to avoid this same feeling (the "trauma paradox"). That means that while the individual tries to elaborate on the traumatic experience in order to increase prediction and anticipation, his/her specific construal choices (negative in content) mean that the trauma gets negatively elaborated. Continuous negative elaboration of trauma places the traumatic experience at the top of the individual's hierarchical conceptual structure. Being superordinate, trauma starts having damaging negative implications for the rest of the conceptual structure by which time PTSD has been established.

Second, an exploration of the construal changes taking place after PTSD patients had undergone various types of trauma therapy revealed an overall consonant picture in regard to personal construct theory's predictions of therapeutic change. However, due to the small number of cases, in both the successful and unsuccessful outcome group, a clear picture was not able to be achieved for each one of the statistical measures. Results from the content analysis, which compared pre- and post-therapy construct categories used by the participants in the successful and the unsuccessful outcome group, revealed that the former group was characterized by a reduction in the overall number of construct categories post-therapy and a simultaneous increase in the number of constructs used within one specific category. This specific construct category differed from client to client suggesting in this way the idiosyncratic nature of therapeutic movement. In the unsuccessful group, on the other hand, the number of construct categories either remained the same or increased at post-therapy presenting a rather "diffused" compared to the more "focused" picture of the successful cases.

Third, a student study was conducted in order to investigate whether certain personality traits could function as possible antecedents or maintaining and perpetuating factors in PTSD. Results were mostly unexpected and counterintuitive showing that individuals characterized by low anxiety were actually the ones displaying patterns of construing commonly found among PTSD patients. Subjects high in anxiety and

defensiveness scores, such as high dissociators, high thought suppressors, and high anxious or defensive high anxious did not show any patterns of construing resembling those observed in PTSD patients. The only low anxious group which has been linked in the literature with maladaptiveness, namely the repressor group, showed some patterns of construing found in PTSD but these looked to be even more pronounced in the low anxious group, which suggests that the supposed pathological influence of defensiveness in the former group was shown to have a rather unexpected prophylactic effect, contrary to expectations.

In order to account for the above findings the author proposed an exegetic model which sees high but normal levels of anxiety as a means of increasing epistemic control, and thus preparedness, for the individual. The concept of epistemic control is seen as akin to the Kellian notion of anticipation, which emphasizes predictability as the main preoccupation in people's construing of the world. It was suggested that relatively high, but normal, levels of anxiety could function as a protective factor for the individual since they can prepare them for the potentiality of the occurrence of a stressful event and thus help them to perceive it in a less threatening and stressful manner.

Finally, some phenomenological aspects of trauma among a special group of people, that of asylum seekers and refugees living in London, were investigated by using different research instruments and theoretical approaches with the purpose of triangulation. Results showed that asylum seekers and refugees use mainly constructs expressing social relations when talking about their traumas. In comparison, traumatized non-refugee people who had experienced interpersonal types of stressors/traumas talked about their experiences in terms of psychological states. This observation came from two sources of data, semi-structured interviews and repertory grids. Additionally, the repertory grid measures of superordinacy showed that trauma seems to occupy a secondary position when compared to the current social issues concerning the lives of the participants, as has commonly been reported by other studies too. Several studies have stressed the fact that much more emphasis has been put on psychological constructs in PTSD diagnosis at the expense of the importance of social dimensions. This thesis supports suggestions that issues of functionality should not be ignored in the diagnosis since it is a common finding that the ability of people to fulfil social roles reduces the severity of psychological distress.

It was also revealed that the social concern articulated by asylum seekers and refugees alike was mainly expressed through the idiom of limbo. The limbo (see Figure

5.7) seems to have a central, orchestrating, role in the participants' narratives of their personal experiences. Despite its centrality, the concept of limbo has seen little attention within the psychological literature. What seemed to be absent in the existing limited psychological literature was a conceptual framework within which the psychological, social, temporal and other parameters of the limbo experience among asylum seekers and refugees could be analysed and explained. In an attempt to better understand its meaning the author borrowed the concept/metaphor of liminality, developed within social anthropology, in order to account for the psychological impact that limbo has on this population. It was suggested that the finding that the asylum seeker and refugee population differed from a non refugee comparison group in the way they construed their traumas, the former in mainly social and the latter in more psychological terms, was thought to express the liminal status of the former group.

Avoiding any essentialist account that would regard Westerners as generally different from non-Westerners, this study proposed that the social relations constructs used by the refugees were not just an expression of their greater preoccupation with social relations in general, but rather, that the social relations constructs were in fact an expressed idiom of liminality. In that respect, liminality, marginalization, social alienation and other similar social conditions can be thought as being instrumental in initiating and perpetuating individual trauma. In that respect the present thesis supports the notion of psychosocial trauma by recognizing the role that the society plays in providing all the validation contexts for the individual's most important constructions (Kelly, 1955).

6.2. Clinical Implications

The personal construct model of traumatisation proposed in this thesis has at its core the notion of anticipatory or else epistemic control. As previously described, the person starts elaborating the traumatic experience in order to increase prediction and anticipation and thus reduce anxiety and the sense of threat. This is a normal and healthy psychological process that helps the individual to adapt after experiencing a major incident.

Problems start arising not from the process itself but rather from the specific construals (mainly negative) involved in it. The person chooses, explicitly or implicitly,

certain ways of explaining the experience which lead to negative perceptions and evaluations of himself/herself, the meaning of the experience, and its implications. Elaboration continues in order to assist understanding and reduce anxiety and as a result trauma becomes over-elaborated/superordinate within the individual's conceptual structure and, due to its negative construal, it starts having damaging implications for the rest of the system because of its position. Probably the most damaging effect comes as the result of the relative neglect of those aspects, mainly positive, in the person's life that could have a constructive role to play in the process of understanding and coping with the event. Therapy, therefore, should be able to provide the context for incorporating and exploring those positive aspects with the purpose of increasing their beneficial effects for the client.

People who have experienced trauma might also fall into another "cognitive trap" (see Miceli & Castelfranchi, 2005, p. 313) when trying to exert anticipatory/epistemic control over pragmatic control. This is an effort mainly aimed at reducing anxiety, as previously mentioned, but it might also lead to the person getting stuck when the thought "if I cannot foresee I cannot act" is followed to its extremes. As the aforementioned authors observe "this attitude hampers actual planning and is also likely to hamper the management of feelings of apprehension"(Ibid). They further propose that "clinical interventions should challenge the implicit assumption...that epistemic control, if so absolutely conceived, would favour pragmatic control on both negative events and anxiety itself (Ibid).

Since this thesis supports the notion of trauma as the result of certain construal choices made by a person over a period of time during which the traumatic experience gets over-elaborated on the basis of dysfunctional and negative appraisals, it should follow that early intervention might be helpful. As already mentioned, early intervention should be useful in assisting the individual make certain choices in their elaboration of their traumatic experiences so that negative aspects of self, others, and the world in general do not get elaborated to such an extent as to become superordinate within their conceptual structure, or else, the main reference points in their life narratives. Evidence, based on randomized control trials, has shown that short courses of cognitive-behavioural therapy (4-6 sessions) "starting in the first month after trauma lead to significant improvement and are superior to supportive counselling" (Ehlers & Clark, 2003, p. 824).

Since this thesis rejected the notion of un-elaborated or dissociated memories of trauma as causative factors in PTSD it follows that interventions should mainly concern not so much the reconstruction of the traumatic memory, which would probably increase its elaboration with negative consequences for the individual, but rather the meaning attached to it by the individual. In that respect, PTSD is not the result of the person's inability to remember but rather the result of a certain interpretation of what happened. In providing help to traumatized individuals the results from the psychotherapy outcome study of this thesis should be taken into account. As shown, patients with positive outcomes showed an increased "focus" on a specific category of meaning which differed from client to client. This finding suggests that each individual patient has their own unique way of interpreting reality as well as their own unique way of "moving" towards psychological adjustment. That last point reminds us of what Kelly (1955) termed as 'transitive diagnosis', which referred to the avenues of movement open to the individual rather than to a classification system based upon disease entities.

Finally, it should also be stressed that early intervention could be useful in alleviating or preventing so-called secondary problems, such as unemployment, substance abuse, divorce, etc, that very often follow trauma. As the asylum seeker and refugee study in this thesis has pointed out, the social aspects of trauma and the related issues of functionality should be not only part of the diagnosis but also part of the treatment of PTSD.

6.3. Limitations and future research

Due to the small participation in the post-therapy assessment of PTSD clients conclusions regarding psychotherapy outcome are rather difficult to draw with certainty. Future studies need to have a larger number of participants within each of the outcome groups so that statistical analysis of repertory grid measures can be both possible and meaningful. Also, the comparison between the elicited constructs' content of the pre- and post therapy repertory grids should be performed on a larger scale to see if the pattern revealed in this thesis could be generalized.

It would also be important to see whether the focus on a specific construct category, observed in the successful outcome group (post-therapy), is content specific or

it varies according to each individual. The present findings have indicated that the latter might actually be the case. However, that does not necessarily mean that certain underlying patterns could not also exist. Bearing in mind that in two out of the three successful cases the most “dominant” construct category at post-therapy appeared to be related to personal growth, it would be interesting to explore two questions, first, whether the personal growth category is actually a common finding among successful cases, and second, whether this same category had been the focus of the therapist during treatment, or, was spontaneously developed during its course. This latter question requires a different research design in which both therapists and clients should be interviewed after the analysis has taken place and conclusions have been reached regarding the construct content.

Another issue that merits further investigation is the newly developed and so far relatively untested measure of conflict as estimated via GRIDSTAT. Results in this thesis have shown an interesting pattern in which trauma appears to contain comparatively high conflict, an indication of high elaboration, that we would not otherwise expect to find since the overall conflict measure was also found to be negatively correlated with PTSD indices. The finding, however, is in agreement with the model of PTSD proposed in this thesis which sees trauma as over-elaborated. Hence, the hypothesis that PTSD might relate to a simultaneously decreased elaboration in the overall conceptual structure and an increased elaboration of the traumatic experience could further be tested by taking into account not only statistical indices but also the specific constructs and elements involved.

The author’s proposed distinction between process- and content-related repertory grid measures could be further explored. Findings in the present thesis suggest that process measures might be necessary but not sufficient indices of pathological states. On the other hand, process measures could be indicative of vulnerability factors since: i) the most vulnerable of the two sexes, namely women, was found to differ in regard to process only measures to men; ii) process measures were also found to indicate similarities in construing between the PTSD and the low anxious student group. This last point could be also investigated within a prospective design that would examine whether individuals low in trait anxiety are at higher risk of developing post-traumatic reactions after a traumatic encounter.

Finally, as regards the central role of “limbo” in the lives of asylum seekers and refugees and the relative absence of psychological literature on the subject further

research is needed in order to explore the issue. Attention should be paid not only to the obvious negative psychological effects of the phenomenon on people's lives but also to the potentially positive and prophylactic effects that certain types of limbo could create for individuals, as already shown in this thesis.

6.4. Conclusions

This thesis supported a notion of trauma which is in opposition to the main established models of PTSD, including the personal construct model developed by Sewell et al (1996). Trauma is seen not as the result of impoverished, un-articulated, memories which are qualitatively different from normal memories. Rather it is contended that trauma is the product of certain construal choices made, explicitly or implicitly, by the individual in order to avoid, initially, negative psychological impact (e.g. anxiety, threat). The concept of the "trauma paradox", introduced by the author, describes the process by which the individual in his/her effort to elaborate/make sense of trauma in order to increase prediction and thus epistemic control over the experience, it ends up elaborating those aspects of the trauma (mainly negative) that have as a result the placing of trauma right at the top of the individual's conceptual structure. Trauma becomes superordinate, in that sense, and as such it soon starts having major negative implications for the rest of the individual's conceptual structure.

In this conceptualization anxiety experienced in the initial phase of trauma is seen as a normal and functional reaction that mobilizes the individual to start elaborating the experience in order to readjust its construal. In that sense, and in accordance with findings from a normal (student) sample in this study, it is further suggested that anxiety could have a prophylactic effect for individuals that present with relatively high but normal levels of it.

Also, this thesis wants to emphasize the importance of societal influences in shaping reactions to stress and trauma as revealed from the study of PTSD in an asylum seeker and refugee population in this thesis. It is theoretically consistent and practically imperative to conceive of trauma as psychosocial and to start incorporating issues of functionality within its diagnosis as well as treatment. Finally, the psychosocial construct of "limbo" should be taken into account as regards the welfare of asylum seekers and refugees and its applications should be sought within the context of therapy

as well as that of social policy given its potentially prophylactic effects for the individual.

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Appendix A

-
Element elicitation list for the PTSD study (15 x 15 LERG)

1. The best that happened to you in primary school
 2. The worst thing that happened to you in primary school
 3. The best that happened to you in adolescence
 4. The worst thing that happened to you in adolescence
 5. The best that happened to you in early adulthood in your professional life
 6. The best thing that happened to you in early adulthood in your personal life
 7. The worst thing that happened in early adulthood in your professional life
 8. The worst thing that happened in early adulthood in your personal life
 9. The best thing that happened to you in the last two years
 10. The worst thing that happened to you in the last two years.
 11. The traumatic event you experienced
 12. An event (positive or negative) that has happened since the traumatic event
 13. Another event (positive or negative) that has happened since the traumatic event
 14. The best thing that could happen to you in the future
 15. The worst thing that could happen to you in the future
-

Consent Form

Consent form for research into the treatment of Post Traumatic Stress Disorder.

Name:

Address:
.....
.....

Post Code:

Tel. No:

E-mail:

I confirm that I have agreed to participate in a research study into the effectiveness of treatments for Post Traumatic Stress Disorder being conducted by the Clinical Psychology Department of Barnet, Enfield and Haringey Mental Health NHS Trust. I was provided with a research sheet which explained the assessment procedures involved. I understand that the information obtained during the course of the investigation will remain confidential and will be used for research purpose only.

Signed **Date**

RESEARCH INFORMATION SHEET

Study title

An investigation of treatment for post-traumatic stress disorder

What is the purpose of the study?

We wish to explore people's experiences of very stressful events and their reactions to these events. Some of these reactions are known as post-traumatic stress disorder, and we shall be investigating how people who suffer from this disorder are helped by psychological treatment. This will allow us to make sure that our treatment methods for people who have experienced very stressful events are as effective as possible.

Why have I been chosen?

You are one of approximately 25 people who have been chosen to participate in the study because they have been referred for psychological treatment following experiences of very stressful events.

Who is organizing the study?

The study is organized by the Clinical Psychology Department of Barnet, Enfield and Haringey Mental Health Trust in collaboration with the Psychology Department of the University of Hertfordshire. It will last for approximately three years.

What will happen to me if I take part?

You will be given some questionnaires to complete on either one or two occasions (depending upon how long you have to wait for treatment) before you commence treatment. You will also be seen by a Research Assistant before you commence treatment to complete another psychological test, taking approximately one hour, involving questions about events which you have experienced in your life. The Research Assistant will then repeat the procedure and ask you to complete the questionnaires again soon after you finish treatment to check on your progress.

If you prefer to be seen by a Research Assistant of a particular gender, do let us know and we shall ensure that this is arranged. If you need an interpreter, we shall also make one available.

Appendix A

Are there disadvantages in taking part in this study?

Apart from giving up some of your time, we do not believe that there are any disadvantages in taking part. It is possible that you may find it distressing to talk with the Research Assistant about the events which you have experienced, and if this does make you very distressed the Research Assistant will inform your therapist if you have one or arrange for you to be seen by a clinical psychologist. You are also free to withdraw from the study at any time, without this affecting the standard of care which you receive.

What are the possible benefits of taking part?

Apart from receiving £10 for your participation some people find the research assessment interesting, and, if you wish, we would be happy to give you feedback on your results at the end of your participation in the study. The information we get from this study may help us to improve our treatments for people who have experienced very stressful events.

Confidentiality – who will know I am taking part in the study?

All information which is collected about you during the course of the research will be kept strictly confidential. Although reports will be written about the results of the research, the information contained in these will be anonymised so that you cannot be recognized from it. If you have a tape recorded interview, the tape will be wiped clean before the end of the study.

What will happen to the results of the study?

The results of the study will be written up in a thesis by one of the Research Assistants, and it is also intended to publish them in scientific journals. If you wish, we shall send you a summary of the results when the study has been completed.

Contact for further information

Professor David Winter, Clinical Psychology Department, Barnet, Enfield and Haringey Mental Health Trust, Premier House, 112 Station Rd., Edgware, Middx., HA8 7BJ (tel. 0208 951 2010) or Christos Sermpezis, Psychology Department, University of Hertfordshire, College Lane, Hatfield, Herts., AL10 9AB (tel. 01707 285079).

Appendix A

Content analysis of pre- and post-therapy constructs for the successful and unsuccessful outcome groups (inter-coder agreement rates are provided for each grid in brackets)

The successful outcome group

Client 1 (pre-therapy constructs)

Controlled by someone else/Controlling myself (*Control*)
My nearest and dearest/People I don't like (*People*)
Part of my life/Out of my life (*Life*)
Things I had to do/Things I don't have to do (*Morality*)
Starting fresh/Carrying on as usual (*Personal growth*)
Upsetting events/Happy (*Emotion*)
Frightened/Content (*Emotion*)
Losing someone close/+keeping somebody close (*People*)
My son/Not having my son (*People*)
Depression/Normal (*Emotion*)
Happy/Unhappy (*Emotion*)
School/Working (*Work*)
Part of me dying/Living a normal life (*Life*)
Death/Life (*Life*)
Work/Not working (*Work*) (100% agreement)

Client 1 (post-therapy constructs)

Having no control/Controlling yourself (*Control*)
Moving on/Staying the same (*Personal growth*)
Working/Not working (*Work*)
Progression within myself/Not progressing (*P. Growth*)
Something taken away/Nothing being taken away (*Evaluation*)
Growing up/Not growing up (*P. Growth*)
My life would be over/Living a normal life (*P. Growth*)
Disappointment/Not being disappointed (*Emotion*)
Achievements/No achievement (*P. Growth*)
Letting go/Not letting go (*P. Growth*)
Happiness/Unhappiness (*Emotion*)
Acceptance/Not accepting (*Evaluation*)
Living a normal life/Living in fear (*Emotion*)
Doing well/Not doing well (*Evaluation*)
Fighting for things I believe in/Doing nothing about it (*P. Growth*) (100% agreement)

Appendix A

Client 2 (pre-therapy constructs)

Helped me to become independent/Being subjected to someone else's rules (Control)
Made me feel insecure/Being in control (Control)
Feeling fearful/feeling safe (Emotion)
Feeling anxious/Feeling calm (Emotion)
Positive moves/Being static (Personal growth)
Worrying about loved ones/Not carrying (Relationships)
Having to stand up for myself/Not standing up for myself (Personal strength)
Having confidence/Being weak (P. Strength)
Inspirational/Boredom (Motivation)
Feeling scared/Feeling secure (Emotion)
Feeling alone/Feeling supported (Relationships)
Feeling embarrassed/Being bold (Emotion)
Unethical/Being just (Morality)
Succeeding/Failing (P. Growth)
Feeling strong/Feeling ineffectual (P. Strength) (100% agreement)

Client 2 (post-therapy constructs)

Success/Static (P. Growth)
Stability/Instability (P. Growth)
Obstacles/Unhindered (P. Growth)
Upsetting/Equanimity (Emotion)
Inspiration/Boring (Motivation)
Hard work/Giving up (P. Growth)
Fresh starts/In a rut (P. Growth)
Happiness/Stress (Emotion)
Humiliation/Unnoticed (Emotion)
Positive/Stationary (P. Growth)
Positive outcomes/Aggravation (P. Growth)
Shaped the future/Uncertainty (P. Growth)
Confidence/Insecure (Emotion)
Opportunities/Blockage (P. Growth)
Resolution/Agitation (P. Growth)..... (93.3% agreement)

Client 4 (pre-therapy constructs)

Feeling horrible/very happy (Emotion)
Optimistic/Pessimistic (Emotion)
Unhappy/Happy (Emotion)
Turned my life upside down/Reborn again (Personal growth)
Confidence/Not sure (Emotion)
Passive/Active (Action)

Appendix A

Embarrassed/Proud (Emotion)
Feeling unsafe/Safe (Emotion)
Getting educated/Uneducated (P. Growth)
Preparing for the future/Not preparing for the future (Personal Growth)
Stressful/Stress free (Emotion)
Being alone/Not alone (Relations)
Feeling bored/Interested (Emotion)
Doing something beneficial/Doing nothing (Action)
Being responsible/Not responsible (Morality) (100% agreement)

Client 4 (post-therapy constructs)

Not happy/Happy (Emotion)
Let down/Glad (Emotion)
Scared/Brave (Emotion)
Negative/Positive (Evaluation)
Feeling alone/Feeling not alone ((Emotion)
Panicked/ Not panicked (Emotion)
Doing something for myself/Doing nothing for myself (Action)
Feeling insecure/Feeling safe (Emotion)
Inspired/Feeling dull (Emotion)
Hopeful/Hopeless (Emotion)
Not motivated/Motivated (Motivation)
Not being full-time mum/Inside walls (Emotion)
Miserable/Thrilled(Emotion)
Bringing happiness/Routine (Emotion)
Learning new skills/Not learning (P. Growth) (93.3% agreement)

The unsuccessful outcome group

Client 5 (pre-therapy constructs)

Happy/Worry (Emotion)
felt useful/felt unworthy (Emotion)
Helping others/Hurt others (Relations)
Fear/Security (Emotion)
Anxiety/Anxiety free (Emotion)
Bad memories/Good times (Past)
Having hope/Hopeless (Emotion)
Abandoned/Being cared for (Relations)
Comforted/Uncertainty (Emotion)
To be a friend of someone/Alone (Relations)
Lost contact with family and friend/Having contact (Relations)
Hardship/Calmness (Emotion)

Appendix A

Death in the family/Family happiness (Relations)
Fellow feeling/Be isolated (Relations)
In desperation/Confident (Emotion)..... (93.3% agreement)

Client 5 (post-therapy constructs)

Beating/Happiness ((Emotion)
Being in a confined space/Freedom (Freedom)
Hardship/Happiness (Emotion)
Ocean/Land (Places)
Sadness/Happiness (Emotion)
Army/People (People)
Problems/Happiness (Emotion)
Dead/Alive (Life)
Happiness/Sadness (Emotion)
Arrest/Freedom (Freedom)
Relatives/Others (Relations)
Friendship/Enemies (Relations)
Alone/With people (Relations)
Hope/Desperation (Emotion)
Settled/Scattered (Emotion)..... (100% agreement)

Client 6 (pre-therapy constructs)

Looking forward to happen/Serious depression (Future)
Unexpected/Think one step ahead (Future)
Good memories/Bad thoughts (Thoughts)
Bad incidence/Good incidence (Events)
Broken bones/Solid structure (Health)
Staring death in the face/Looking for the light (Thoughts)
Cherished moments/Loneliness (Past)
Old times/The present (Past)
Why it happened/Why it didn't happen (Past)
Entertaining/Serious (Emotion)
Time will heal/Fragile (Future)
Minor events/Long way to go (Future)
Joyful events/Future (Future)
Forgotten times/Cherished times (Past)
Whisper in time/Always remembered (Past) (73.3% agreement)

Appendix A

Client 6 (post-therapy constructs)

Negative situation/Positive situation (Evaluation)
Pain/Fit (Health)
Miserable/Happy (Emotion)
Sadness/Excited (Emotion)
Hurting/Not Hurting(Emotion)
Frustrated/Relieved (Emotion)
Afraid/Something to look forward to (Future)
Looking forward to/Can't stand it (Future)
New experience/Same old stuff (Evaluation)
Great time/Not a great time (Emotion)
Always in my thoughts/Something to look forward to (Future)
Negative things in the past/Things in the future (Future)
Something I cannot forget/Something I want to remember (Memory)
Cynical/Optimistic (Emotion)
Cherished moment/Bad experience (Memory) (100% agreement)

Client 7 (pre-therapy constructs)

Black people/White people (People)
Arguing/Quite talking (Evaluation)
Distressed/Happy (Emotion)
Broken feelings/Nice feelings (Emotion)
Feeling like a winner/Feeling like a loser (Emotion)
Nice life/Bad life (Evaluation)
Starting something new/Being stuck (Personal growth)
Being in fear/Being in peace (Emotion)
Being hurt/Being strong (Emotion)
Not successful/Be successful (Evaluation)
Incorrectly judged/Correctly judged (Evaluation)
Proud of yourself/Not proud (Evaluation)
Feeling unsafe/Feeling safe (Emotion)
Being upset/Cheerful (Emotion)
Making your own decisions/Being told what to do by other (Control) (9.3.3%agreement)

Appendix A

Client 7 (post-therapy constructs)

Bad experience/Good experience (Evaluation)

Fighting for my life/Don't care for my life (Motivation)

Bad feeling/Good feeling ((Emotion)

Progress in my life/Stuck (Personal growth)

Successful/Not successful (Evaluation)

Unhappy times/Happy times (Emotion)

Sad/Happy (Emotion)

Lost something/Get something (Evaluation)

Positive events/Negative events (Evaluation)

Feeling empty/Feeling fulfilled (Emotion)

Hard times/Normal times(Evaluation)

Depressed/Not depressed (Emotion)

Good results/Bad results (Evaluation)

Gaining experience/Not learning from your experience (P. Growth)

Feeling distressed/Cheered up (Emotion) (93.3% agreement)

Appendix B

- Element elicitation list for the student study (12 x 12 LERG)

- 1) The best thing that happened to you in primary school
- 2) The worst thing that happened to you in primary school
- 3) The best thing that happened to you in early adolescence
- 4) The worst thing that happened to you in early adolescence
- 5) The best thing that happened to you in late adolescence
- 6) The worst thing that happened to you in late adolescence
- 7) The most stressful event in your life
- 8) An event, positive or negative, that happened to you after your most stressful event.
- 9) The best event in your adult life
- 10) The worst event in your adult life
- 11) The best event that could happen to you in the future
- 12) The worst event that could happen to you in the future

-

CONSENT FORM

TITLE OF STUDY: Construing of positive and negative life events.

Please read the following very carefully:

This study seeks to investigate the way in which people construe personally experienced positive and negative life events. You will be required to complete a repertory grid for which you will be asked to provide some positive and some negative events you have experienced in your life and also to fill in two questionnaires that measure personality traits.

Participation is entirely voluntary, and therefore, you may withdraw from the study at any point without any explanation or justification. Furthermore, all the information you provide will be treated as strictly confidential.

All the documents you complete will remain anonymous. Your documents will be identified by a code number (this is simply to ensure your documents are not mixed up with any other participant). The only exception is this consent form. You are required to state your name, and sign this form once you understand the requirements and agree to take part in the investigation. Please note that the only personal information that will be reported in the write up of this study is your age, gender and occupation.

I agree to take part in this study which has been described (both in writing and discussion) to my satisfaction. I understand that I may withdraw at any time and that the information I supply remains confidential and anonymous.

Signed by participant:

Please print your name:

Date:

Your personal code

Appendix B

Information sheet for student study

Research Project on Construing of Positive and Negative Life Events.

Purpose

The main aim of this project is to look at the ways people think about positive and negative events that happen to have experienced in their personal lives. Research shows that particularly stressful life events could have adverse psychological effects to the person who experiences them. It has also been suggested that this could be related to the fact that people tend to think differently about such stressful events especially as far as the way of connecting them to other positive and negative life events is concerned. This project is part of a broader investigation that seeks to study the same issues within a clinical population and the end aim will be the drawing of comparisons between the clinical and non-clinical populations.

Involvement

You will be asked to complete a Repertory Grid, which is a type of structured interview, and four questionnaires. The session will take approximately one hour to complete. For the Repertory Grid you will be asked to provide 12 events that you have personally experienced. Half of the events will be positive and half negative, including the most stressful event in your life, and subsequently you will be asked to make some comparisons between them and then rate them on a six point scale.

Voluntary

Participation is entirely voluntary. You are free to withdraw at any point during the study and you do not have to offer any explanation.

After the test

In case you feel any kind of distress resulting from your participation in the study you will be asked at the end of the testing to say so. If you feel that you will need any professional help in order to discuss issues that were raised during and as a result of the testing free professional advise from Prof.David Winter (D.Winter@herts.ac.uk), an experienced clinical psychologist who is also the supervisor of this study, or the University's counselling service can be provided (contact number: 01707- 284405).

Confidentiality

Although you are required to sign a consent form the investigator will not keep a record of your name and all information you provide will remain strictly confidential and only used for the purposes stated here.

Further information

For further information please contact Christos Sermpezis on 01707 285089 or at: c.sermpezis@herts.ac.uk

Thank you for your participation

Appendix C: Refugees & Asylum seeker study

INTERVIEW SCHEDULE FOR REFUGEES AND ASYLUM SEEKERS

1. Can you tell me about any unsafe situations in your life before your traumatic experience in your home country?
2. Can you tell me about the traumatic experiences that happened to you in your home country?
3. Can you tell me about any unsafe situations that you experienced since you left your country?
4. Can you tell me about any traumatic experiences since you left your country?
5. If you are applying for asylum, how have you experienced this process?
6. Can you tell me about times in your life recently when you have been anxious or depressed?
7. Can you think of something that you have read, seen or heard about recently that made you feel anxious or depressed? .
8. Can you tell me how you have experienced your contacts with health and social services in this country? What have been the most helpful and unhelpful aspects of these experiences?
9. Can you tell me about your contacts with other services and agencies in this country? What have been the most helpful and unhelpful aspects of these experiences?
10. Can you tell me about what you consider to be the most helpful and unhelpful aspects of the psychological treatment you received?

Content categories of trauma related constructs

Table 1: Content categories of trauma related constructs in refugees and asylum seekers.

Categories	Constructs
Social relations (54.5%)	<ol style="list-style-type: none"> 1. Abandonment/Being cared for 2. Hurt others/Helping others 3. Brainwashed/Freedom to choose 4. “Big brother”/Free society 5. Police mistreatment/Treated with respect 6. Losing someone/Not to lose someone 7. Lonely/Not lonely 8. What people shouldn’t do/What people should do 9. Violence/Happiness 10. Humiliation/Not humiliated 11. Loss/To find someone 12. Traumatized/Treated with respect
Psychological states (27.27%)	<ol style="list-style-type: none"> 1. In desperation/confident 2. Felt unworthy/Felt useful 3. Frightened/Being brave 4. Feeling unsafe/Feeling safe 5. To grieve/Not to grieve 6. Fear/Happiness
Negative experiences (18.1%)	<ol style="list-style-type: none"> 1. Negative experience/Good experience 2. Bad experience/Good experience 3. Bad news/Good news 4. Negative experience/Happiness

Appendix C

Table 2: Content categories of trauma related constructs in non-refugee car accident trauma.

Categories	Constructs
Social relations (17.8%)	<ol style="list-style-type: none"> 1. Worrying about loved ones/Not carrying 2. Having to stand up for myself/Not standing up for myself 3. Cherished moments/Loneliness 4. Making my children suffer/making my children happy 5. Able to contribute/Unable to contribute
Psychological states (64.2%)	<ol style="list-style-type: none"> 1. Positive moves/Being static 2. Succeeding/Failing 3. Having confidence/Being weak 4. Time will heal/Fragile 5. Looking forward/Serious depression 6. Achievement/Losing 7. Guilty/Not guilty 8. Satisfaction/Devastation 9. Sense of loss/Sense of gain 10. Feeling hurt/Feeling great 11. Death/Happy and alive 12. Feeling physically better/Physically worse 13. Feeling like a failure/Successful 14. Looking forward to new adventures/No hope for the future 15. Feeling incapable/feeling capable 16. Staring death in the face/Looking for the light 17. Unexpected/Think one step ahead 18. Whisper in time/Always remembered
Negative experiences (14.2%)	<ol style="list-style-type: none"> 1. Bad incident/Good incident 2. Forgotten times/Cherished times 3. Good memories/Bad thoughts 4. Happy times/Sad times

Appendix C

Table 3: Content categories of trauma related constructs in non-refugee interpersonal trauma

Categories	Constructs
Social relations (29.1%)	<ol style="list-style-type: none"> 1. Needed someone vulnerable/Able to cope by myself 2. Look after someone else/Not helping 3. Standing up for yourself/Letting people walk over me 4. Loosing love/Finding love 5. Losing someone you care about/Finding myself 6. Communication/Silence
Psychological states (66.6%)	<ol style="list-style-type: none"> 1. Crying at event/Not crying 2. Traumatic/Calm 3. Proud for someone else/Proud of myself 4. Being happy in my job/Loosing my job 5. Being angry/Messed up 6. Having my life back/My is better 7. Unhappy/Overjoyed 8. Shocked/Not being shocked 9. Fear/Safety 10. Grief/Comfort 11. Devastated/Positivity 12. Out of control/In control 13. Moving forward/Going backward 14. Hate/Happiness 15. Positive thoughts/Uncertainty 16. Fighting/Torn apart
Negative experiences (4.1%)	<ol style="list-style-type: none"> 1. Something I wanted to do/Something I don't want to do

Appendix D

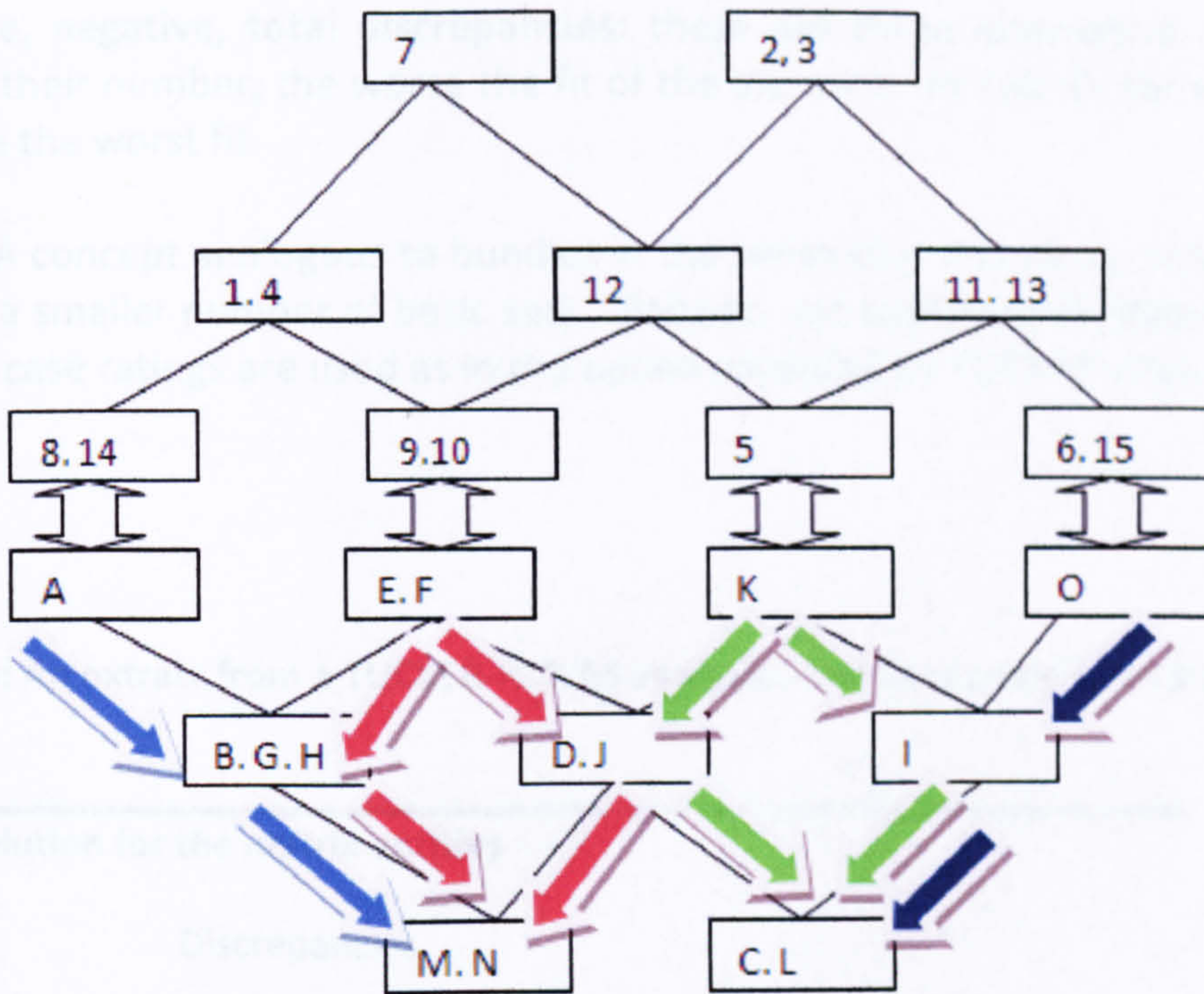


Figure D: An example of a HICLAS graphic representation of its solution. In this case, letters represent elements and numbers represent constructs of a 15 × 15 repertory grid.

What is described in the above figure as constructs in HICLAS language is referred to as objects and what is described as elements is referred to as attributes. To be consistent with HICLAS literature the terms objects and attributes will be used here in order to assist with further definitions (see Mylle, 2007). To begin with we should state that any object (construct) can be described by an attribute set (a set of elements). All objects (constructs) which have the same attribute set (a set of elements) are defined as "equivalent" and constitute an object class. In Fig. D, objects (constructs) 6 and 15 have the same attribute (element) pattern, they both relate to attributes (elements) I, C, L. The following definitions are based on the above conceptualizations:

Bundles: "the attribute set of each *object* class can be decomposed into a smaller number of basic sets, which may eventually overlap, and from which the original *sets are reconstructed* as the union of these basic sets, these basic sets are called bundles...the number of bundles in such a matrix is called the rank of the solution..."(Mylle, 2007, p. 4-5). The reader should be reminded here that the rank is chosen by the analyst, based on certain criteria described in the thesis, before proceeding with the analysis. In the graphic representation of a HICLAS solution in Fig. D there are four bundles represented by same coloured arrows. In the output text file in Tab. D there are also four bundles represented by the columns in the bundle matrix consisting of ones and zeros.

Appendix D

Positive, negative, total discrepancies: these are three alternative measures of fit. The higher their number, the worse the fit of the element. In Tab. D, for example, slab 3 seems to have the worst fit.

Slabs: A concept analogous to bundles in the sense that it is also a way of reducing the data within a smaller number of basic sets. Slabs do not appear in dichotomous HICLAS data but only in case ratings are used as in the option provided by TUCKER-HICLAS.

Table D: An extract from a TUCKER-HICLAS analysis. The data come from the INDCLAS data output file.

Final solution for the matrix entities

	Discrepancies			GFit	Bundles
	Neg	pos	tot		
Slab 3	44	18	62	0.637	1011
Slab 1	3	40	43	0.811	1111
Slab2	30	14	44	0.782	1111

Appendix E

Table E: Demographic details of the PTSD sample

Label (gender)	Age	Ethnic background	Type of trauma	Time since trauma (months)
P1 (Female)	29	European Union	Childhood sex abuse	240
P2 (Female)	28	British	Attack	24
P3(Female)	28	British	Beheading on internet	36
P4(Female)	24	British	Rape	24
P5(Female)	46	British	Traffic accident	36
P6(Female)	38	British	Traffic accident	24
P7(Female)	34	British	Attack	18
P8(Female)	61	British	Death of husband	24
P9(Female)	41	Middle Eastern	Head injury	36
P10(Female)	39	Middle Eastern	Death of husband	1
P11(Female)	31	British	Traffic accident	72
P12(Female)	42	Middle Eastern	Traffic accident	36
P13(Female)	36	British	The London terrorist attack	6
P14(Female)	40	Middle Eastern	Childhood sexual abuse	360
P15(Female)	28	Middle Eastern	Husband's disappearance	36
P16(Female)	31	Eastern European	Rape	60
P17(Female)	39	British	Attack	60
P18 (Female))	52	British	Learning about a suicide	24
P19 (Male)	39	Indian Subcont.	Torture	24
P20(Male)	18	British	Attack	12
P21(Male)	35	Eastern European	Torture	72
P22(Male)	27	African	Mugging	12
P23(Male)	32	British	Traffic accident	9
P24(Male)	40	Middle Eastern	Imprisonment	120
P25(Male)	52	British	Traffic accident	36
P26(Male)	42	Middle Eastern	Suicide attempt	40
P27(Male)	22	Indian Subcont.	Attack	18
P28(Male)	40	Eastern European	Torture	8
P29(Male)	41	African	Witnessed his family killing	156
P30(Male)	48	British	Traffic accident	10
P31(Male)	25	British	Traffic accident	48
P32(Male)	38	British	Witnessed a suicide	36
P33(Male)	18	Eastern European	Torture	24
P34(Male)	28	Eastern European	Attack	48
P35(Male)	54	Middle Eastern	Fighting at war	240
P36(Male)	23	European Union	Attack	24

Appendix F

Table F1: Pearson Product-Moment correlations between repertory grid and questionnaire measures for female (N = 18) patients.

Measures	<u>Ov.Neg.</u>	<u>Over. ±</u>	<u>Neg.Em</u>	<u>Ov.Con.</u>	<u>1st Com.</u>	<u>Var.Int.</u>	<u>T.S.T</u>
PTSD						-.38	
re-exper.	.61**	-.55**	.63**	-.35	.63**		-.23
avoidan.	.70**	-.66**	.56**	-.54*	.47*	-.31	-.28
arousal	.52*	-.51*	.59**	-.33		-.40	-.14
BDI	.25	-.15	.43*	-.04	.64**	-.32	-.17
BAI	.28	-.38		-.05	.46*	-.12	.10
IES	.48*	-.24	.45*	-.09	.47*	-.26	.13
intrusion	.37	-.36	.40	-.49*	.21	.04	-.08
avoidan.	.42*	-.43*	.31	-.36	.22	-0.7	-.22
GHQ	.23	-.20	.37	-.46*	.14	.13	0.6
	.29	-.27	.13	.03	.30	-.00	-.18

Ov.Neg. = overall number of negative valence construct poles; Over.± = overall mixed valence construct poles; Neg.Em. = number of negative emergent poles; Ov.Con. = overall percentage of conflict; 1st Com. = percentage of variance accounted by first principal component; Var.Int. = variability of intensity; T.S.T = time since trauma; * p<.05 - ** p<.01

Table F2: Pearson Product-Moment correlations between repertory grid and questionnaire measures for male (N = 18) patients.

Measures	<u>Ov.Neg.</u>	<u>Over. ±</u>	<u>Neg.Em</u>	<u>Ov.Con.</u>	<u>1st Com.</u>	<u>Var.Int.</u>	<u>T.S.T</u>
PTSD		-.07	.08	-.07	.28	-.25	-.55*
re-exper.	-.02						
avoidan.	.47	-.46	.22	-.36	.00	-.40	-.25
arousal	-.37	.20	-.15	.01	.32	.04	-.58*
BDI	.02	-.08	.23	.08	.30	-.32	-.48*
BAI	.17	-.22	.24	.14	.12	-.45	-.13
IES	.50	-.42		-.11	.32	-.20	-.23
intrusion			.59*				
		-.55*	.38	.07	.27	-.18	-.01
avoidan.	.65**	-.81**	.73**	.02	.42	-.37	.12
GHQ	.00	-.10	-.10	.11	.03	.08	-.17
	.12	-.21	.26	.16	.29	-.37	-.29

Ov.Neg. = overall number of negative valence construct poles; Over.± = overall mixed valence construct poles; Neg.Em. = number of negative emergent poles; Ov.Con. = overall percentage of conflict; 1st Com. = percentage of variance accounted by first principal component; Var.Int. = variability of intensity; T.S.T = time since trauma; * p<.05 - ** p<.01