

**VOLUME 1**

**Train Drivers' Experiences of Witnessing a Railway Suicide: A Repertory Grid Study.**

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## ABSTRACT

Over 200 railway suicides occur on the British Rail Network (BRN) every year. Research into the physical and psychological effects of this traumatic event on train drivers has been limited, and has focused very little on the mediating influence of personal factors. Kelly's Personal Construct Psychology (PCP, 1955) was used in the current study to explore the relationship between train drivers' views of themselves and others, and the psychological impact of witnessing a railway suicide. This was achieved through the use of repertory grid technique. Repertory grid measures of tightness of the overall construct system, level of elaboration of the self and others, construed distances between the self and others, conflict, extremity of ratings, and superordinacy were compared with participants' scores on a measure of the psychological impact of the event (Impact of Event Scale Revised, IES-R, Weiss & Marmar, 1997). The fifteen participants in the study also completed a background information questionnaire. A content analysis of the constructs used in the repertory grids, and a thematic analysis of a follow up interview with two of the participants was also conducted. The findings indicated that most drivers experienced symptoms suggestive of a significant posttraumatic stress (PTS) reaction following the incident. For many this appeared to be short-lived, but for some the incident had longer lasting effects, and a third of the sample had been given an official diagnosis of Post-Traumatic Stress Disorder (PTSD). Possibly due to the small sample size, many of the correlations did not achieve statistical significance. However, discrepancy between the self and ideal self, and the number of moral constructs employed by participants, were both positively associated with reported levels of psychological distress. The superordinacy of the traumatised construct, and the number of emotional constructs employed by participants, were both negatively associated with reported levels of psychological distress. These findings therefore gave some support to Sewell and Cromwell's (1990) PCP model of trauma, and to the importance of emotional processing of traumatic events. The thematic analyses added information about the nature of the changes experienced by train drivers following these events, and the impact of contextual factors. The repertory grid technique proved useful in measuring the influence of personal meaning making on the impact of traumatic events. The findings suggest that drivers can best be supported clinically by reducing the discrepancy between their self after the event and their ideal self, increasing their ability to emotionally process their experience, and by giving consideration to issues such as anger and blame. Limitations of the research are presented, as well as suggestions for further research.

## CHAPTER ONE: INTRODUCTION

This chapter will begin by looking at the background of the current research. This will include the provision of information about the national rail network in the United Kingdom (UK), including information about the frequency of railway suicides, as well as definitions of key terms relevant to the area. The chapter will then proceed to summarise and critically review the previous research that has examined the psychological effects of witnessing a railway suicide. The scope of the chapter will then widen to consider the main theories and research that have attempted to explain and understand psychological responses to potentially traumatic experiences. There will be a specific focus on the contribution PCP has made to our understanding of this area. The chapter will end with some conclusions, leading to a presentation of the aims and hypotheses of the current research.

For the search strategy used in this research, please see Appendix 14.

### 1.1 Setting the context: Suicides and The British Rail Network (BRN)

Every year there are approximately 210 suicides on Britain's overground railways and a further 50 on Britain's underground network (RSSB, 2012). There are approximately 15,000 train drivers in the UK (Webb, 2009), and with train drivers' careers spanning up to fifty years, these statistics make it highly likely that a train driver will witness at least one railway suicide.

Railway suicides have been described as a 'violent method of choice' (van Durzen cited by Geoghegan, 2010) and by their very nature may be horrific for anyone who witnesses them. However, it is widely recognised that the impact of railway suicides on train drivers themselves is particularly significant. In their review of the literature into PTSD amongst rail workers, Lunt and Hartley (2004) suggest that part of this reason may be the drivers' position at the front of the train. Travelling at speeds of up to 125 mph, a driver's vision is focused on the space directly in front of them, on a view that does not change significantly during the course of the journey. Of course, were the train to hit someone, this view would change drastically and suddenly, with the train driver perhaps even making eye contact with the person before impact. An additional factor that may contribute to the significance of the impact on train drivers themselves is that they have inadvertently become the agent of another human being's suicide, without having any control over this. A train travelling at 125 mph takes approximately 1.5 miles to stop: therefore even if the driver were to see the person, it would be impossible for them to avoid hitting them. Finally, as highlighted by Lunt and Hartley (2004), unlike rescue

workers, train drivers are not selected for their jobs for their resilience, yet after the potentially distressing event, the driver still has responsibility to their remaining passengers, whilst managing the immediate aftermath, often on their own. Due to these factors it could be argued that it would be difficult for a driver not to be affected by witnessing a railway suicide.

As will be evident from the literature review, although research into the area has been carried out, research studies have tended to include accidents as well as non-fatal incidents in their analyses, have tended to involve the use of questionnaires and surveys, and have mainly been conducted internationally. This highlights the need for research looking specifically at the psychological effects of the particularly unique experience of witnessing a railway suicide, using more in-depth methodologies that allow consideration of the influence of personal factors, and which is focused on the BRN. There is currently little understanding as to how best to support train drivers both before and after such incidents, and without further research this situation will persist.

## 1.2 Key Terms

In the literature that investigates the physical and psychological effects on drivers of incidents on the railways, the main focus is on Person-Under-Train (PUT) incidents. These incidents are where a person is hit or run over by a train, and include those incidents that have occurred either by accident or suicide attempt, which may involve either members of the public, or railway workers. To avoid confusion the incidents studied in this research will be referred to as 'railway suicides', to mean that a person has deliberately placed themselves in a position where they are likely to be hit or run over by a train.

## 1.3 Review of the literature into psychological effects of railway incidents on train drivers.

Much of the research carried out in the area suggests that incidents on the railways have a significant physical and psychological effect on drivers, with some of these effects being short-lived, but with others being longer term. The traumatic nature of the event has led the majority of the research conducted to focus on the prevalence of PTSD.

In one of the few studies carried out in Britain, Farmer, Tranah, O'Donnell & Catalan (1992) found a PTSD prevalence rate of 16.3% in London Underground drivers who had experienced PUT incidents when interviewed one month afterwards. However, one month later the drivers no longer met the criteria for PTSD, although other diagnoses e.g. phobic states and depression, were present in 39.5% of drivers.

In a later study, again on the London Underground, Tranah and Farmer (1994) found a prevalence rate for PTSD of 17% in drivers exposed to a PUT incident when interviewed one month after the incident, but at 6 months after the event, no driver presented with PTSD, though in two cases symptoms of depression and phobias were still present. However, there were a significant number of participants who dropped out at the 6 months stage of the study, perhaps affecting the reliability of the results.

Both these studies would therefore appear to suggest that the prevalence of PTSD in this population, is roughly equivalent to the percentage of people who are generally found to develop PTSD after a traumatic event (approximately 14%, National Institute for Health and Care Excellence (NICE), 2005), but that it is a relatively short-lived reaction, and other psychological reactions may be more persistent.

One of the largest and most cited studies in the field is that by Vatshelle and Moen (1997) who sent postal questionnaires to all registered train drivers in Norway, and found that drivers who reported experiencing a distressing on-the-track incident (70% of which had occurred in the last ten years) reported a significantly lower physical and mental health status compared to those who had not experienced such an incident. The response rate was high at 70.2%, and the sample was large, and considered to be representative of the general population of train drivers in active service. The authors also completed a fair consideration of the methodological limitations of their research, including the limits of cross-sectional studies and questionnaires. It is therefore a sound study that demonstrates the possible links between on the track incidents, and long-term changes to the physical and mental health of train drivers.

A more recent study by Su Yum et al. (2006) again utilised a questionnaire method, contacting all drivers in active service in the five major railway stations in Korea, and in its conclusions reported that those drivers surveyed who had experienced PUT incidents expressed more adverse physical and psychological symptoms than those who had not experienced such incidents. The authors did not try to generalise this statement outside the sample, as although they reported a high response rate for the questionnaire at 79.9%, this only represented 20.9% of all drivers enrolled in the Korean Rail Co-operation. The authors did not state whether the differences in samples were significant. In the aims of the research the authors stated that they wished to report on the level of PTSD present in their sample and that they were using the Impact of Event Scale (IES, Horowitz, Wilner & Alvaraez, 1979) to do so. However, according to Sundin and Horowitz (2003) the IES should not be used as a sole measure in the diagnosis

of PTSD. The study can therefore be critiqued for not making it clear that it is reporting on psychological symptoms thought to be linked to the *Diagnostic and Statistical Manual for Mental Disorders* (4th ed., text rev.; *DSM-IV-TR*; American Psychiatric Association, 2000) criteria for PTSD, rather than actual levels of PTSD in drivers exposed to such incidents. Nevertheless, as also stated by the authors, for one of the first studies of its kind in Korea, the study usefully highlighted that the problem of physical and psychological effects on train drivers involved in such incidents, does exist, highlighting the need for further research.

Research carried out in the last ten years seems to have moved from retrospective to prospective research, with the inclusion of control groups and more measures of symptomatology at various time points.

In another questionnaire based study, Siol, Schaefer, Thomas and Kohle (2003) sent questionnaires to all train drivers in active service in Germany. The response rate was 45.5% and the authors provided clear information regarding the representativeness of their sample compared to the larger driver population, reporting that differences in demographic characteristics were not statistically significant. The authors used several measures to measure symptomatology and reported that 50% of those respondents that reported experiencing at least one major railway accident had stress symptoms of ‘presumable clinical relevance’ (p.3) in the first weeks following the accident, and that at an average of four years after the event, 8.2% still described symptoms that would comply with the *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed., rev.; *DSM-III-R*; American Psychiatric Association, 1987) criteria for PTSD. The authors’ use of more than one measure of PTSD symptoms, as well as their provision of clear information about design issues and methodological flaws, makes this a sound study.

Limosin et al. (2006) carried out a longitudinal study with three time periods, in which drivers who had experienced PUTs were compared with matched controls. They reported that 15 days after the event the PUT drivers had significantly higher general health questionnaire (GHQ) scores and more acute stress disorder (ASD) diagnoses than controls, but at three months and one year they reported no significant differences between the two groups. The authors provided clear information about the characteristics of drop-outs, and reported no major differences between the scores of those who dropped out and those who completed the whole study. At first glance these negative results appear to contradict much of the previous research. However,

in the discussion the authors highlight that all drivers in the study were part of a prevention programme, which included supportive counselling, medical visits and the prescription of drugs, if required. It may be therefore that the reason for no significant differences between PUT drivers and controls was because of the positive impact of this programme. In a study by Cothureau et al. (2004), similar results were reported, with significant differences in GHQ scores and clinical diagnoses between exposed drivers and controls only being found at time point one, not at the subsequent time points. However, it should also be acknowledged that this again was a French study, where presumably all drivers exposed to PUT incidents went through the same prevention programme as in Limosin et al's (2006) research.

In summary then, the literature presents a complex picture as to the nature and length of the psychological reactions of train drivers to witnessing railway suicides, suggesting that acute stress reactions are common immediately following the event, but that the frequency and nature of other longer term reactions is more complex. It is also notable that much of the research, particularly that conducted in recent years, appears to have taken place outside of the UK, has largely involved the use of questionnaires and surveys, and has made it difficult to distinguish the specific effects of witnessing railway suicides (considered to be a particularly unique trauma), because many of the research studies combine accidents and non-fatal incidents in their analyses. It is therefore clear that more research in this area from the perspective of the BRN needs to be carried out.

Research in the area has also attempted to look at the factors that may contribute to making drivers more vulnerable to experiencing the negative physical and psychological effects generally found in the research.

In the study by Su Yum et al. (2006) mentioned earlier, the authors reported that younger train drivers were more likely than older train drivers to have a high IES score following an incident. They also reported that the level of PTSD in train drivers who had experienced three PUT incidents, was significantly higher than those who had only experienced one or two. However, as previously mentioned it is questionable how valid their diagnoses of PTSD were, having only used the IES on its own. Nevertheless, the study still points to correlations between symptoms thought to be similar to those found in PTSD, and age and number of incidents.

In one of the most recent studies in the area, carried out in Germany, Mehnert, Nanninga, Fauth and Schaefer (2012) found no significant differences in the course of PTS, anxiety, depression, distress and quality of life between drivers who experienced one or more than one railway related accident or suicide, contradicting the results of Su Yum et al. (2006). In one of the only studies to look at the relationship between post-trauma thoughts and the impact of the incident, the authors also reported that anxiety, sense of guilt and sense of alienation emerged as the most important factors in predicting PTS six months after the drivers had completed a rehabilitation programme. A strength of this study was its longitudinal design, which allowed comparison of scores across different time points. It also used well validated questionnaires to measure PTS, anxiety, depression and quality of life. However, the generalisability of these results to the wider train driver population is perhaps questionable, as the study used participants who were currently enrolled on an inpatient rehabilitation programme. Additionally, the study had a small sample size and experienced significant drop-out rates at time point three and it was reported that these drop-outs had higher levels of PTSD at time point two than those who completed time point three. The study also did not factor into its analyses the presence of other life events or previous psychotherapeutic support, which may have affected participants' scores on the questionnaires at the various time points in the research. Nevertheless, the authors acknowledge these limitations, and have highlighted the need for more research into the factors that can play a role in leading to and maintaining distress following such incidents.

Limosin et al. (2006) also looked at the factors that may make someone more susceptible to experience negative psychological consequences following a PUT incident. They reported that the presence of acute and chronic psychosocial stressors in the person's life, immediate help post incident not being available, and being single, divorced or widowed as negative predicting factors. In one of the only studies to consider the influence of whether the PUT was an accident or suicide, they report that the type of incident did not make a significant difference to scores.

Cothereau et al. (2004) reported similar vulnerability factors including prior traumas, presence of stressful life events at the time, and driving the train away alone after the incident.

Again, the research that has been carried out regarding vulnerability factors seems to have taken place in countries other than the UK, has tended not to consider the influence of the type

of incident, or of personal, not just contextual factors, and has largely been quantitative, involving the use of questionnaires and surveys.

It is clear from the literature review therefore that there is a distinct lack of research using qualitative methodologies that would allow a more in-depth analysis of the effects of PUT incidents and the factors that influence vulnerability to these effects, from the perspective of the drivers themselves.

In summary, although the results from the research are complex, there is evidence that these events do affect drivers, yet the impact of their profession on their mental health has been given less research attention than that of other professions such as fire-fighters, police officers and rescue workers. As such their voices are being unheard in the public area.

## 1.4 Trauma

### 1.4.1 Definition

*The Diagnostic and Statistical Manual for Mental Disorders* (4th ed.; *DSM-IV*; American Psychiatric Association, 1994), defines a traumatic event as one that involves ‘actual or threatened death or serious injury, or to a threat to the physical integrity of self or others’ that produces ‘intense fear, helplessness, or horror’ (as cited by McNally, 2003, p.79). Railway suicides therefore clearly have the potential to meet these criteria.

### 1.4.2 Post-Traumatic Stress (PTS)

Rothschild (2000) defines traumatic stress as ‘stress that results from a traumatic incident’ and PTS as traumatic stress that persists following (post) a traumatic incident (p. 7). She states that ‘it is only when PTS accumulates to a degree that produces the symptoms outlined in *DSM-IV*’ that the term PTSD can be applied (p.7).

### 1.4.3 Post-Traumatic-Stress Disorder (PTSD)

PTSD is one of the most well-known and well-studied psychological responses following exposure to a traumatic event.

According to *DSM-IV-R*, in order to receive a diagnosis of PTSD a person must have been exposed to a traumatic event, and following this have experienced symptoms of intrusion (re-experiencing the event e.g. through flashbacks), avoidance (avoiding reminders of the event) and hyper-arousal (physical symptoms arising from activation of the autonomic nervous system, e.g. increased heart rate) that lead to significant impairment in functioning, and last longer than one month (APA, 2000).

Kessler et al. (1995) cited by (NICE, 2005) reported to have found that the risk of developing PTSD after a traumatic event is 8.1% for men and 20.4% for women.

The guidance states that people at risk for PTSD in the UK include people 'who have been exposed to or have witnessed an extreme traumatic stressor, such as deliberate acts of violence, physical and sexual abuse, accidents, disaster or military action' (p.7). The populations of people highlighted as being particularly vulnerable to experiencing such stressors in the UK include military personnel, emergency workers, the police and refugees.

The aetiology of PTSD has been a controversial subject, and whilst it is now widely recognised that the main cause of PTSD is the traumatic event experienced by a person, reasons as to why some people go on to develop PTSD after such an event, whilst others do not, remain unclear. It has been difficult to investigate potential vulnerability factors because of the heterogeneous nature of the populations exposed to trauma, and the variety of methods used to study responses to it.

Nevertheless a number of factors seem to have been consistently supported by the research as being predictors of PTSD following exposure to a traumatic event, with the strongest empirical support for the influence of post-trauma risk factors. These factors include age (Brewin, Andrews & Valentine, 2000), previous trauma (Brewin, Andrews & Valentine, 2000; Ozer, Best, Lipsey & Weiss, 2008; Cukor et al., 2011), prior psychological adjustment (Ozer, Best, Lipsey & Weiss, 2003), family history of psychopathology (Ozer, Best, Lipsey & Weiss, 2008) trauma severity, (Brewin, Andrews & Valentine, 2000; Frazier et al., 2011), perceived life threat during the trauma (Ozer, Best, Lipsey & Weiss, 2003), presence of additional life stressors at the time of and following the trauma (Brewin, Andrews & Valentine, 2000), and lack of social support during and post trauma (Brewin, Andrews & Valentine, 2000; Ozer, Best, Lipsey & Weiss, 2008; Frazier et al., 2011; Meyer et al., 2012). These research studies have therefore suggested similar factors to those previously highlighted as perhaps making train drivers more

susceptible to experiencing long term psychological distress following witnessing a railway suicide.

With the increased growth of the positive psychology movement the literature also reflects a movement towards the consideration of protective factors both pre- and post-trauma, which may reduce the likelihood of someone who has been exposed to a traumatic event, experiencing PTSD and other psychological reactions. Although this research is limited there is some support for the positive effects of forgiveness (Orcutt et al., 2005), self-esteem (Frazier et al., 2011), optimism (Frazier et al., 2011), and empathy (Brockhouse et al., 2011).

Recently there have been several research and academic ‘arguments’ about the validity of diagnoses such as PTSD. Indeed it does appear that much of today’s ‘normal’ suffering is becoming increasingly pathologised. This is evidenced in part, by the increasing number of diagnostic categories being added to each new edition of the DSM. Frances (2010) states that if approved, the inclusion of new diagnoses and lowered diagnostic thresholds in the DSM V (5th ed., *DSM-V*; American Psychiatric Association, in press) will lead to ‘the inclusion of many normal variants under the rubric of mental illness’ resulting in ‘massive overtreatments with medications that are unnecessary, expensive, and often quite harmful’ (p.1). It is also felt that diagnoses do not capture the full range of a person’s experience following a trauma (Anderson, 2005). The current research has therefore chosen not to look at the prevalence of PTSD in the sample, but to look at the psychological impact of the event as measured by the IES-R, a content analysis of the meaning participants have ascribed to the event, and an in-depth analysis of a semi-structured interview with two of the participants. This allows attention to be paid to the personal factors that may have an effect on this impact. Regardless of where professionals stand on the issue of diagnosis, the importance of finding ways to relieve human suffering, particularly that which persists over time, is paramount, and understanding the factors that contribute to it is an important part of doing so.

### 1.5 Theories of psychological responses to trauma

Several theories exist as to why people develop psychological difficulties following trauma, including depression, anxiety, phobias and PTSD. The main ones will be covered here, as well as some that are lesser known. What most of these theories appear to have in common is a belief that it is a lack of processing (in one form or another) or integration of, the traumatic event into an individual’s life that leads to longer term psychological difficulties.

### 1.5.1 Information processing

There are a number of different information processing theories, some of which are reviewed in papers by Brewin and Holmes (2003) and Bisson (2009). Both sets of authors highlight that the key concept behind these theories is that there is something special about the characteristics of a trauma memory and how it is represented, that mean if it is not processed and integrated appropriately within a person's wider memory system; psychopathology will result, because this memory interferes with everyday information processing. Lang (1979) cited by Brewin and Holmes (2003) provides a good explanation for what is meant by this, suggesting that patients who experience longer term difficulties following a traumatic event, have 'unusually coherent and stable fear memories that are easily activated by stimulus elements that may be ambiguous but bear some resemblance to the contents of the memory. When the fear network is activated, the person experiences the same physiological reactions and tends to make meaning judgments that accord with the original memory' (p.11). This prevents the event from being integrated, as it still has such high arousal associated to it, and the feelings and thoughts experienced at the time are easily re-triggered. The focus of this theory is therefore on the traumatic event itself, rather than wider social, individual and contextual factors, hence why these essentially cognitive theories have been described as 'information-processing' theories. Some of these theories include: Foa's Fear Network (Foa and Kozak, 1986; Foa, Steketee and Rothbaum, 1989); Janoff-Bulman's (1992) Theory of Shattered Assumptions; Chemtob, Roitblat, Hamada, Carlson, and Twentyman's (1988) Cognitive Action Theory; Creamer, Burgess and Pattison's (1992) Information-Processing Theory; Brewin, Dalgleish and Joseph's (1996) Dual Representation Theory; and Power and Dalgleish's (1997) Schematic, Propositional, Associative and Analogical Representational System (SPAARS) .

### 1.5.2 Neurocognitive and Cognitive Models

The main neurocognitive theory is that of Brewin et al. 1996, and is termed dual representation theory. It is again a type of information processing theory. The central tenet of the theory is based on evidence from memory research that suggests there are two distinct types of memory: verbally accessible memories that are easily recalled and accessible and situationally accessible memories that are unconscious until triggered (Bisson, 2009). It is suggested that longer term psychological problems occur following trauma, because the memory has not been successfully emotionally processed through both types of memory representations. In order for successful emotional processing to occur, it is argued that people need to be exposed to these usually

unconscious situationally accessible memories, through being exposed to triggers that give rise to symptoms such as flashbacks, in which the emotions that were present at the time of the trauma are recreated. Once this occurs it is argued that cognitive readjustment occurs because the person receives full and accurate sensory and physiological information regarding the event, and can then make conscious attempts to integrate the conflicting trauma-related information with pre-existing schemas about the world, allowing restoration of a sense of safety and control (Coetzee & Regal, 2005).

Ehlers and Clark (2000) proposed a cognitive model of the reasons for the development of longer term psychological problems following trauma. They propose that negative appraisals of what happened underpin the development of such problems. They argue that a person develops excessively negative appraisals about external threat, viewing the world as a dangerous place, and excessively negative appraisals about internal threat, viewing the self as incapable, leading to misinterpretation of situations and therefore of a sense of current threat being induced (Bisson, 2009). Like Brewin et al.'s (1996) theory, it is also suggested that certain external stimuli become strongly associated with particular responses and unless these are addressed, the problems will continue. Cognitive Behavioural Therapy (CBT) treatment of psychological problems following trauma is based on this model, focusing on challenging the appraisals and detecting external triggers and developing experiments to overcome them. It is currently the treatment of choice for PTSD as recommended by NICE guidelines (NICE, 2005).

### 1.5.3 Psychodynamic

Psychodynamic explanations of trauma and its effects have been developed over the years and taken many different forms. However, the main tenet behind these ideas is summarised by Fine, Moore and Burness (1990) who explain that psychological responses to trauma are representative of the breakdown that occurs when the individual's 'psychic apparatus' i.e. the ego, id and superego, is suddenly presented with stimuli, either internal or external (e.g. the traumatic event) that are too powerful to be managed in the usual way. It is postulated that a 'protective shield' is therefore breached and the ego becomes overwhelmed, losing its mediating capacity, and therefore leading the person to experience a wide range of disorganised emotions and behaviours including helplessness and panic. The aim of psychoanalysis is therefore to stabilise the ego, and bring the 'psychic apparatus' back into alignment. Later conceptualisations have focused on the dissociation that can result from this psychic

breakdown, suggesting that traumatised individuals create separate ‘self-states’, ‘so that each can continue to play its own role, unimpeded by awareness of the others’ (Bromberg, 2003, cited in Ringel, 2011, p. 66.). The emphasis of treatment is not therefore on developing a single cohesive self, but by developing self-awareness, helping individuals become conscious of previously unconscious, dissociated self-states, leading to an overarching sense of coherence, and an ability to tolerate distress and internal conflict without dissociating, meaning that this conflict can be worked through and successfully integrated.

#### 1.5.4 Narrative

One of the key ideas behind narrative therapy is that people are known by the stories they tell themselves and others about their lives. When people are experiencing difficulties the story of these difficulties can become the person’s ‘dominant story’ obscuring other stories which often contain forgotten or unnoticed elements about the person’s life, such as their strengths and achievements as well as times when they have overcome their difficulties. One of the key aims of narrative therapy is to bring these stories to the fore (Payne, 2006) freeing the person up from the dominant story and therefore allowing them to move forward. In terms of trauma it is postulated that the focus of work should be less on the post-traumatic reactions themselves (e.g. depression, flashbacks) but more on how the traumatic event has affected the individual’s identity, in that the story of the trauma has become a single story dominating an individual’s sense of who they are, and that once that identity is re-established the post-traumatic reactions will eventually disappear (Payne, 2006).

#### 1.6 Personal Construct Psychology (PCP)

The final theory to be discussed is that of PCP. This part of the chapter will look in detail at PCP explanations of psychological reactions to traumatic experiences, provide a rationale for why I have chosen methods from this theory for my current research, and then end with a presentation of the aims and hypotheses of the current research.

PCP was founded by George Kelly in 1955, Kelly’s fundamental idea was that our psychological processes are guided by the ways in which we anticipate or predict events, and that we do so by our construing, or interpretation and understanding, of current and past experiences. He stated that each of us is therefore a scientist, ‘seeking to make accurate predictions about our world and then control the events that take place in it’ (Burnham, 2008, p. 2). In light of this analogy Kelly talked about the Experience Cycle (Kelly, 1970). The first

phase of the experience cycle is the *anticipation phase*, where a prediction about a certain event will take place. The second phase is the *investment phase*, in which the person invests in this anticipation – for example has thoughts and feelings about the event. The third phase is the *encounter phase*, where the person experiences the event. The fourth phase is the *confirmation and disconfirmation phase*, where the person assesses the encounter in relation to what they originally predicted. In the final *constructive revision phase*, the person reconstrues if necessary, based on the information obtained during the encounter phase. Thus the cycle is complete and fresh predicting and a further cycle may then occur.

According to Kelly construing takes the form of bi-polar constructs, arguing that ‘much of our perception of objects and experiences falls into relatively simple dichotomies: good/bad, right/wrong, light/dark, happy/unhappy and so on’ (Burnham, 2008, p.7). It is these contrasting judgements that are defined as constructs. According to Kelly in order to know what someone means when they use the term happy, we would need to know what they would call people who are not happy – the contrast. The idea is that each one of us has a very personal and individual system of making sense of the world, and therefore not everyone’s contrast is likely to be the same, for example one contrast of happy could be sad, whereby another person’s could be quiet. This then tells us more about what the person means when they use the term happy than were we not to know the contrasting part of the construct. The ways in which we think, feel about and understand the world depend on the nature of this system of personal constructs that we have devised (Burnham, 2008).

Following on from this, another key idea of Kelly’s theory is that of constructive alternativism, meaning that because there are infinite ways to construe the world, everybody’s construing is likely to be different; therefore an individual can change their world in a significant way by changing how they construe any part of it (Burnham, 2008).

‘... all of our present interpretations of the universe are subject to revision or replacement... there are always some alternative constructions available to choose among in dealing with the world. No one needs to paint himself into a corner; ... no one needs to be the victim of his biography’ (Kelly, 1955, cited in Burnham, 2008, p. 10).

To explain this idea more concretely Burnham (2008) provides an example from Fransella and Dalton (1990), which looks at the way in which a change in one pole of a construct can have profound consequences for the individual who uses it. Person A construes people who are not

his friend as his enemy (friend/enemy), whereas Person B construes people who are not her friends as her acquaintances (friend/acquaintance). We can therefore imagine their different reactions to meeting people for the first time, and how this construing may lead either one of them into difficulties.

To summarise then, PCP argues that we are constantly construing ourselves, our experiences, and the objects and people around us in these dichotomous ways, and that this construing helps us to predict our world. Although there is a focus on the individual, there is also a recognition that this anticipation or construing occurs within a social and cultural context, and is thus influenced by this.

If we move on to look at psychopathology, PCP would argue that feelings of anxiety come from the awareness that the situation one is confronted with falls outside of one's construct system – i.e. we do not have the constructs to be able to make sense of, and therefore predict, what is going to happen in the situation.

We can perhaps understand PTSD as an extreme form of anxiety following a traumatic event and therefore this explanation makes sense. A person is unlikely to have encountered the traumatic event before, and is therefore unlikely to have the constructs to be able to make sense of it.

Sewell and Cronwell's (1990) PCP model of PTSD supports this idea, proposing that traumatic experiences disrupt an individual's world in two main ways:

Firstly, because the experience cannot be construed in relation to the individual's other life experiences it introduces a sense of 'chaos' and 'unpredictability' into their world (Sewell, 2003, p.166). The individual does not have the constructs to make sense of the experience and therefore is unable to successfully integrate the experience into their life. The trauma is therefore under-elaborated.

Secondly, the traumatic experience 'invalidates at least some preferred ways of understanding and experiencing the self and self-in-relation-to-other' (Sewell, 2003, p.166) that can lead to a sense of social isolation.

Put more simply, it is proposed that people experience PTSD and other post-traumatic reactions because the event does not fit with their constructions of their world, their self and their self in

relation to the people around them. They therefore develop a fragmented trauma-related construct subsystem which is largely unstable. It is this fragmentation that is said to account for the various symptoms of problems such as anxiety, depression and PTSD that can occur following a traumatic experience.

Research evidence has supported this model. For example, Sewell et al. (1996) in their study of Vietnam veterans reported that those veterans who had not been able to elaborate their traumatic experience were more likely to have PTSD than those who had been able to.

More recent research by Sermpezis and Winter (2009) however has argued that within PTSD the traumatic event is in fact over-elaborated, and that the main research that Sewell based his model on had fundamental flaws in its analysis of the data used, and is therefore invalid. Sermpezis and Winter (2009) therefore proposed that in PTSD there is actually greater depth and breadth of construing (someone can adequately describe a lot of the trauma experience), and the traumatic experience has become more super-ordinate (i.e. occupying a more super-ordinate position within the construct system of a traumatised individual and therefore becoming more important) than non-traumatic experiences. This makes it difficult for the individual to detach from the traumatic experience.

However, due to there being more research evidence to support Sewell and Cromwell's (1990) model, the current research will hypothesise that the level of elaboration of the driver's view of the self after the event will be negatively associated with the level of psychological distress reported.

Several research studies have found that traumatic events create differences between how an individual construes themselves now, compared to how they would have before the incident, and their ideal self, as well as differences in how they construe themselves compared to other people (Button, 1990; Leach, Freshwater Aldridge, & Sunderland, 2001; Harter, 2000; Harter & Neimeyer, 1995; Sewell & Williams, 2002). These studies therefore support the aspect of Sewell's model that suggests that the traumatic event invalidates people's preferred ways of understanding and experiencing themselves and others. This research will aim to add further support to these findings.

### 1.6.1 Tightness of construing

PCP proposes that new ways of thinking require alterations in the tightness of the constructs being used to predict and understand a situation, the self or others (Jankowicz, 2004). Tightness in this sense refers to the glue between someone's construing – if construing is too tight then an individual is unlikely to be able to reconstrue in the face of a life-changing event such as a trauma, but if construing is too loose, then the person might not be able to make a concrete prediction about the world, and in both situations this would increase anxiety. Change within a person's construct system as a result of the experience cycle is, as argued by Kelly, what leads to the experience of emotion (Butler and Green, 2007). During the Experience Cycle constructs can become validated or invalidated, and Kelly stated that validation can lead to a person experiencing feelings such as love, happiness, and satisfaction whereas invalidation could lead to a person experiencing feelings such as grief, sadness, rage and anger (Butler and Green, 2007). Looser constructs are said to be less vulnerable to invalidation, whereas tight constructs can easily be invalidated, and thus it might be predicted that tight construing might lead the train drivers in the current research to be more susceptible to experiencing psychological distress following witnessing a railway suicide.

#### 1.6.2 Conflict

Conflict in a person's construct system is defined as occurring when people or events are construed in conflicting ways by the individual (Bell, 2004). For example, a person may construe 'assertive' people as 'selfish', yet construe one of their friends as assertive but selfless, invalidating the assertive-selfish construction, and leading to conflict in the person's construct system. This concept has been considered in relation to trauma when Sporle, Winter and Rhodes (2011) proposed that because mental conflict can be seen to be a feature of psychological problems, traumatic life events might lead to 'greater inconsistency in construing' expressed as high levels of conflict in the person's construct system. Although their research did not find evidence to support this hypothesis, the authors suggested that further research regarding this concept needs to be undertaken. The current research will therefore aim to test this hypothesis by looking at the relationships between the level of conflict associated with the self after the event, and the level of conflict associated with the person who committed suicide, and the psychological impact of the event.

#### 1.6.3 Extremity of Ratings

Research by Bonarius (1977) as cited in Hardison and Neimeyer (2012) has suggested that the extremity of ratings given to elements and constructs in a repertory grid is a 'joint function of the meaningfulness of the constructs and the elements' and could reflect psychopathology (p.10). We might therefore predict that in this research more extreme ratings will be related to higher levels of reported psychological distress following the railway suicide.

#### 1.6.4 Superordinacy

Superordinacy looks at construct hierarchy, and is a measure of how important a given construct is to an individual. It is proposed that changes in more superordinate constructs imply changes in many other areas of an individual's construing (Hardison & Neimeyer, 2012). Therefore in this research, it may be proposed that the more superordinate the position occupied by the construct 'traumatised' in train drivers' construct systems, the higher the levels of reported psychological distress following the railway suicide.

#### 1.6.5 Content of Construing

Coding systems such as those by Feixas, Geldschlager, and Neimeyer (2002) and Landfield (1971) have been developed to code constructs into categories and themes, thus allowing a more in-depth analysis of the content of construing, rather than just quantitatively examining the relationships between elements and constructs. Several research studies looking at the content of construing in individuals who have experienced traumatic events using systems such as these, have reported that these individuals have a limited use of emotional constructs in contrast to people who have not experienced such events (Bhandari, Winter, Messer, & Metcalfe, 2011; Harter, 2000; Harter, Alexander, & Neimeyer, 1988; Harter, Erbes, & Hart, 2004; Harter & Neimeyer, 1995; Leach et al., 2001). A possible explanation for these results is proposed by Harter, Erbes, & Hart (2004), who state that the 'use of fewer constructs related to emotional arousal (and) more concrete, physical and factual descriptions may reflect the emotional numbing characteristic of trauma survivors' (p. 40). In the current research we may therefore predict that fewer emotional constructs will be linked with a greater level of reported psychological distress following the traumatic event.

In the Feixas et al (2002) coding system as well as a category relating to emotional constructs, there is also a category relating to moral constructs, which is 'a judgement regarding the person's kindness, generosity, fairness or other characteristic of this type' (p.11). The

conceptualisation of suicide as a selfish act is widely established in society, despite attempts to counteract this view, and research into attitudes towards suicide have consistently supported this (Batterham, Calear & Christensen, 2013; Colucci, 2008; Hjelmeland et al., 2008; Lee et al. 2007; Sato et al. 2006). Prinz (2006) highlights that ‘when we judge that a moral rule has been violated, we typically have a negative emotional response’ (p. 30). If we construe selfishness as a moral judgement, it could therefore be predicted that those train drivers who view the act of a person jumping in front of their train as a violation of morality (as evidenced by greater moral construing), will report a greater level of psychological distress.

#### 1.6.6 Guilt

According to Kelly, guilt is an ‘awareness of acting in ways at odds with core role construing’ (Butler & Green, 2007 p.40). In other words guilt is experienced when we act in a way we would not have expected of ourselves. It might be hypothesised that train drivers are less likely to feel guilty following a railway suicide than an accident for which they were responsible, because it was the person’s choice and the train driver had no control over the outcome of the event. However, often following the incident drivers are sometimes interviewed by the British Transport Police (BTP), sent for medical tests, and summoned to the coroner’s court. It could be hypothesised that the presence of these factors may increase the chance the driver will look to themselves as to blame, increasing a sense of guilt, and therefore lead to a higher discrepancy between their sense of self before the incident and self after the incident, and as a result a higher psychological impact of the event.

#### 1.7 PCP and Railway Suicides

In terms of this study a PCP approach to exploring the impact of witnessing a railway suicide may therefore be implicated in several ways.

Firstly, significant changes to an individual’s construct system following exposure to traumatic events have been indicated by the literature, but the results are complex. Train drivers represent a fairly homogenous group of individuals, whose exposure to trauma occurs purely by chance, thus representing ideal circumstances to study how construing of the self and others may affect the psychological impact of trauma. According to PCP our psychological processes are guided by the ways in which we anticipate events, and we anticipate events by our construing of

current and past experiences. Therefore as Sewell (2003) asserts PCP ‘lends itself to the analysis of traumatic experiences’ (as cited in Fransella, 2003, p.223).

Secondly, in light of Kelly’s fundamental concept of constructive alternativism, the opportunity to identify the forms of construing that may be helpful in protecting drivers from experiencing negative reactions following witnessing a railway suicide, could provide a valuable contribution to the existing support available to drivers.

Thirdly, much of the research into the impact of witnessing accidents and suicides on the railways has been quantitative, with very little research investigating the perspective of drivers themselves. The aim of this research was to gain information about the impact of these events from the drivers themselves. PCP provides an ideal way in which to do so, because it allows the study of an individual’s personal meaning making, through the study of their own individual and unique construing, without the imposition of others’ construing on them.

Finally, as such PCP fits with the researcher’s own epistemological position, that there is an independent reality – a ‘real world’ – but that this world can only be known indirectly through our own individual constructions of it, and that these constructions are also influenced by the social and cultural context within which we live.

This study therefore hopes to address:

- The paucity of research on the BRN, with the majority of studies mentioned above being carried out in France, Germany and Scandinavian countries such as Sweden and Norway.
- The lack of research focusing solely on railway fatalities caused by suicides, which as highlighted by Lunt and Hartley (2004) can be considered a particularly unique trauma.
- The lack of research involving more in-depth methodologies that allow for a richer description of the effects of railway suicides from the perspectives of the train drivers themselves.

## 1.8 Research Aims

- To explore the personal construct systems of train drivers involved in railway suicides using repertory grid technique (Kelly, 1955), and explore any relationships between the repertory grid measures and the psychological impact of the event.

- To explore the content of train drivers' construing, and explore any relationships between measures of this and the psychological impact of the event.
- To consider how an individual's construing of themselves and others following a traumatic event can be used clinically, and how this may impact on the policies and working practices of companies whose drivers are involved in railway suicides
- To assess the influence of personal and contextual factors (such as age and gender) on the psychological impact of the event on the driver.

## 1.9 Research Hypotheses

### 1.9.1 Personal Construct Hypotheses

#### *Hypotheses related to construing of the self and the other*

- 1 Dissimilarity in the construing of the self before the event and the self after the event will be positively correlated with the psychological impact of the event reported.
- 2 Dissimilarity in the construing of the current self and the ideal self will be positively correlated with the psychological impact of the event reported.
- 3 Dissimilarity in the construing of the current self and other train drivers will be positively correlated with the psychological impact of the event reported.
- 4 Dissimilarity in the construing of the self as train driver before the event and the construing of the self as a train driver after the event will be positively correlated with the psychological impact of the event reported.
- 5 Dissimilarity in construing of the current self and the person who committed suicide will be positively correlated with the psychological impact of the event reported.

#### *Hypotheses related to structure of construing*

- 6 There will be a positive correlation between overall conflict concerning the self after the event and the psychological impact of the event reported.
- 7 There will be a positive correlation between overall conflict concerning the person who committed suicide and the psychological impact of the event reported.
- 8 There will be a positive correlation between the degree of tightness of construing and the psychological impact of the event reported.

- 9 There will be a positive correlation between the superordinacy of the traumatised construct, and the psychological impact of the event reported.
- 10 There will be a negative correlation between the degree of elaboration of the self after the traumatic event, and the psychological impact of the event reported.
- 11 There will be a positive correlation between the number of extreme ratings in the whole grid, and the psychological impact of the event reported.
- 12 There will be a positive correlation between the number of extreme ratings applied to the element 'person who committed suicide', and the psychological impact of the event reported.

*Hypotheses related to the content of construing*

- 13 The number of emotional constructs will be negatively correlated with the psychological impact of the event reported.
- 14 The number of moral constructs will be positively correlated with the psychological impact of the event reported.

1.9.2 Questionnaire Hypotheses

1. There will be a positive association between presence of guilt inducing factors, and psychological impact of the event.
2. There will be a positive association between the presence of stressful life events, either during or immediately following the event, and the reported psychological impact of the event.
3. There will be a negative association between the presence of social support (as measured by relationship status) and the reported psychological impact of the event.
4. There will be a positive association between the reported psychological impact of the event and whether the driver was alone after the event.
5. There will be a positive correlation between the reported psychological impact of the event and the total number of suicides witnessed by the driver in their career.
6. There will be a negative correlation between the reported psychological impact of the event and the age of the driver.

## CHAPTER TWO: METHOD

### 2.1 Design

This study used mixed quantitative and qualitative methodology.

For the quantitative methodology the study employed a cross-sectional correlational design. The aim was to explore relationships between the train drivers' self-reported psychological impact of witnessing a railway suicide and how they construed themselves and others, both prior to and following the suicide. A further aim was to explore any relationships between demographical and contextual factors reported by the train drivers, and the self-reported psychological impact of the event.

For the qualitative methodology a content analysis of the constructs drivers used to describe themselves and others was conducted, in order to add depth to the analysis of the data. Two case studies were also included. In addition, a follow-up semi-structured interview was carried out with the two participants who were chosen as case studies, during which participants were presented with the findings of their repertory grid and asked questions in relation to this. These participants were selected on the basis that they were some of the more open participants about their experience, and that they demonstrated an ability to be articulate and reflective during their repertory grid interview.

### 2.2 Participants

Participants were train drivers who had witnessed at least one railway suicide whilst driving a train, and were recruited from train operating companies based in the south and south-east of England. Inclusion criteria were:

- The railway suicide having occurred a minimum of three months previously.
- The driver possessing good use of the English language to ensure that they could engage in the interview.

Participants were recruited via the researcher contacting the managing directors of all the train operating companies in the south and south-east of England. The recruitment was restricted to this geographical area in order to maximise the potential sample size while keeping the distance the researcher would have to travel to interview participants within practical limits. Of the thirteen companies contacted with information about the research, six indicated a willingness to take part. These companies then either put the researcher in direct

contact with the train driver managers, who, following the provision of further information about the research, identified and approached suitable drivers directly, and/or displayed the researcher's recruitment poster (see Appendix 5) in the depots for the drivers themselves to contact the researcher.

All potential participants expressing an interest in the study, were then contacted by the researcher to provide further information about the study and identify whether they were willing to take part. For those agreeing a meeting was then set up to conduct the interview.

## 2.3 Measure Overview

The three measures used in the research were the IES-R (see Appendix 7), a researcher designed background information questionnaire (see Appendix 9), and a structured interview using a repertory grid (see Appendix 8). As previously mentioned, a fourth measure, a semi-structured interview schedule developed by the researcher, was used with two participants during a second meeting at a later time point (see Appendix 10). These measures were chosen in order to best answer the specific aims and hypotheses of the research.

### 2.3.1 Demographic Data

Basic demographic data and background information regarding the railway suicide was obtained for each participant, in order to both describe the sample, and fulfil one of the aims of the research, which was to look at the relationship between personal and contextual factors and the self-reported psychological impact of the event. This information therefore included:

- Gender of the driver
- Age of the driver
- Ethnic Group
- Marital status
- Number of years as a train driver
- When the railway suicide occurred
- Number of railway suicides witnessed during career
- Length of time the driver was on their own following the incident, if at all
- Whether medical tests were carried out on the driver following the incident
- Whether the driver was interviewed by the BTP following the incident
- Whether the driver attended coroner's court in relation to the incident

- Whether the driver took time off after the incident, and if so, for how long
- Whether the driver received workplace support
- Whether the driver had been given a diagnosis of PTSD in the last five years.
- Whether the driver had received professional psychological support or therapy from a mental health professional in relation to their emotional reactions following the incident.
- Whether the driver felt the support systems put in place by their employers were helpful in aiding them to cope with the incident, and if so why, and if not what would have been more useful.

This information was obtained during the initial part of the interview and helped rapport to be built prior to administration of the IES-R and repertory grid. Current age, length of time as a train driver, time since the railway suicide and length of time off following the suicide, were all measured in nearest numbers of whole years, the length of time the driver spent on their own following the incident was measured in minutes.

### 2.3.2 Measure of impact of event.

The IES-R (Weiss & Marmar, 2007) was used as a self-report measure of the psychological impact of the railway suicide on the driver. This is a widely used measure which assesses psychological reactions to a particular event and measures three categories of responses: intrusive experience, hyper arousal and avoidance of thoughts and images associated with that event.

The IES-R is a 22 item self-report questionnaire that requires participants to indicate (on a scale from 0-4) how distressing each difficulty has been for them in relation to the incident. The overall maximum score obtainable is 88. For the three categories of responses a mean score ranging from 0 to 4 is then calculated. Higher scores indicate higher psychological impact of the event. There are no clinical cut-off points for the measure, nor are there any norms. Weiss (2004) states that cut-off points would not be appropriate because the IES-R is not intended to be used as a diagnostic tool. Weiss also highlights that to set a cut-off that would universally apply would be near impossible because of differences in event severity, and time elapsed since the traumatic event that could impact responses on the IES-R, as well as significant differences between the sample used to establish a fixed cut-off and the samples being studied (e.g. firefighters versus women who have been beaten during a sexual assault).

The IES-R is thus not designed to be used as a diagnostic tool for PTSD, but is thought to map on to the DSM-IV criteria regarding symptoms of PTSD stemming from exposure to a traumatic stressor, and has been found to correlate with other more formal measures of PTSD (Creamer, Bell & Failla, 2003). It has also been found to have good internal consistency, concurrent validity and discriminative validity (Beck et al., 2008). As the current researcher did not wish to formally diagnose PTSD, but rather investigate post event psychological distress, and to reduce the amount of time participants had to spend being interviewed, it was thought that this measure would be appropriate. It is also a measure that has been used repeatedly in trauma research (Weiss, 2004).

As the study addresses previous experience, when filling out the scale participants were asked to complete the questionnaire twice. The first time participants were asked to report their peak intensity of reactions from memory, and the second time participants were asked to report their reactions in relation to the incident over the past seven days. It should be noted that the standard time frame in which the IES-R was designed and validated was seven days, therefore asking participants to report their peak intensity of reactions from memory represents a non-standard, modified version of the measure, not recommended by its creators.

It was considered important by the researcher to obtain the driver's own perspective of the impact of the railway suicide, as this was identified as a gap from previous research. The self-report IES-R enabled this aim to be achieved.

### 2.3.3 Repertory Grid

A Repertory Grid was used as the basis of a structured interview with each participant. Repertory Grids (Kelly, 1955) are a way of exploring both the content and structure of an individual's construct system. Repertory Grids are often used in relation to a particular topic, such as in this case where the focus is on the witnessing of a potentially traumatic event. In order to identify how someone has construed a particular topic, a grid involves the comparison of elements; where an element is an aspect of a particular experience (Caputi et al. 2012). The elements for this grid were provided by the researcher and were chosen for their perceived relevance to the topic being researched, as well as from traditional elements used in repertory grids (Fransella, Bell & Bannister, 2004).

The elements chosen related to aspects of the participant or other people, and consisted of;

1. Current self (referred to throughout as personal self or self after the event)
2. Self before the incident (referred to throughout as personal self before)
3. Ideal self
4. Partner or person who most closely fits this description
5. Person I like
6. Person I dislike
7. Self when driving train before the incident (referred to throughout as professional self before)
8. Current self when driving train (referred to throughout as professional self)
9. Drivers who have not witnessed a railway suicide
10. Person who committed suicide in the incident

For elements 4, 5 and 6 participants were asked to think of a person who fulfilled each role.

As can be seen above, it was decided that personal and professional aspects of the self would be treated as separate elements, in light of the traumatic event occurring at work.

Constructs were elicited using the triadic method, where the elements were presented in groups of three to each participant, in the same order, thereby ensuring that each participant compared the same groups of elements. The rationale for deciding which triads of elements to give to participants was based on the particular comparisons the researcher deemed necessary to fulfil the research aims. Therefore in order for comparisons to be made between participants' personal and professional selves both prior to and following the traumatic event, it was important that the first triad include both these elements. Triads two to seven included at least one aspect of either the self before, or the self after the incident (either personal or professional), and an element that referred to a significant other, thus allowing for comparisons to be made between participants and others. Finally, triads eight to ten included the element 'person who committed suicide', and either participants' personal or professional selves and/or other drivers who have not witnessed a railway suicide. This allowed participants to make comparisons between themselves, the 'person who committed suicide' and other drivers.

Participants were then asked for an important way in which two of the elements in the group were alike (identifying the emergent pole of the construct), and thereby different from the third (implicit pole). The elements were written on flashcards to enable participants to physically group together the two elements they had identified as being alike and separate from the third element. Most participants automatically gave both poles of the construct without further prompts, for example “me and my partner are loving, but the person I dislike is mean”. However, if this did not occur automatically, participants were asked to identify the opposite pole, elicited by prompts such as “so if people are not loving, what are they?” All participants were able to generate constructs using the triadic method, with varying levels of prompts needed. All participants used the flashcards as visual aids to construct elicitation.

Once the emergent and implicit pole for the first triad had been elicited, a second group of three elements were presented, with one element in the triad being replaced with a new element. For example, the elements ‘current self’, ‘self before the incident’ and ‘ideal self’ were presented. ‘Current self’ was then replaced by ‘partner or person who most closely fits this description’.

Once all 10 constructs were elicited, participants were asked to rate each element on a scale of 1-6, with 1 representing one pole of the construct, and 6 representing the opposite pole of the construct.

Participants were also asked to indicate their preferred pole of each construct.

An additional construct of ‘traumatised’ was supplied by the researcher in order to access the participants’ views of how traumatised they and others were both before and after the traumatic event. This is a strategy also adopted by Warner (2011) in her repertory grid study of secondary trauma in Samaritan volunteers.

According to Caputi et al. (2012) repertory grids can be interpreted at two basic levels, each focusing on the content and structure of the participant’s constructions. At the content level grids can be analysed qualitatively by considering how specific elements are construed and by examining the meanings of particular constructs. This can be achieved by grouping constructs into categories based on their content. This method was employed by the current research using Feixas, Geldschlager, and Neimeyer’s (1992) classification system for

personal constructs in order to explore possible relationships between content of construing and the impact of witnessing the railway suicide. At the structural level by examining relationships between constructs and elements, a number of features of a participant's personal construct system can be extrapolated. In the current research these summary measures were used to explore relationships between participants' construct systems and the psychological impact of witnessing the railway suicide.

## 2.4 Summary measures of repertory grids

### 2.4.1 IDIOGRID

Each participant's raw grid data was first analysed using the IDIOGRID analysis software (Grice, 2002). This software enables a number of summary measures to be extracted through carrying out single grid Slater analyses (Slater, 1977) for each of the participant's data. The measures used in this research are presented below.

#### *Principal Components Analysis (Slater, 1964)*

A Principal Components Analysis (PCA) is a visual representation of an individual's construct system that simultaneously illustrates elements, constructs, and the relationships between them. It works by translating the numerous elements or constructs into a smaller number of hypothetical components. These components are then used as axes on the graphical representation, on which the constructs and elements are plotted according to how much they load on a particular component. A PCA analysis can provide a measure of the percentage of variance within the construct system accounted for by the first component. The higher the percentage of variance accounted for by the first principal component, the more tightly organised and one-dimensional the individual's construing (Winter, 1992). Therefore a higher score indicates a tighter construct system, and a lower score a looser construct system.

This measure was used in relation to personal construct hypothesis 8: There will be a positive correlation between the degree of tightness of construing of the individual's construct system, and the psychological impact of the event as reported on the IES-R.

For this hypothesis therefore the percentage of variance accounted for by the first principal component was correlated with the IES-R score using SPSS statistical package.

Case examples of individual's PCA plots are presented in the results section.

### *Distances between elements*

IDIOGRID was also used to calculate the distances between each pair of the elements for each participant. This ranges from 0-2, and a distance of 1 is what would be expected by chance, whereas a distance of 0 indicates that the two elements are construed exactly the same. This measure was used to test personal construct hypotheses 1, 2, 3, 4, and 5.

1. Dissimilarity in the construing of the self before the event and the current self (personal and professional) will be positively correlated with the psychological impact of the event reported.
2. Dissimilarity in the construing of the current self (personal and professional) and the ideal self will be positively correlated with the psychological impact of the event reported.
3. Dissimilarity in the construing of the current self (personal and professional) and other train drivers will be positively correlated with the psychological impact of the event reported.
4. Dissimilarity in the construing of the professional self before the event and the construing of the professional self after the event will be positively correlated with the psychological impact of the event reported.
5. Dissimilarity in construing of the current self (personal and professional) and the person who committed suicide will be positively correlated with the psychological impact of the event reported.

### *Superordinancy*

Superordinancy looks at construct hierarchy. It is a measure of how important a given construct is to an individual. It is measured by examining the percentage sum of squares accounted for by that construct. For the current study this measure was applied to the construct supplied by the researcher, namely traumatised, and was thus used to establish to what extent being traumatised figured prominently in an individual's construct system.

This measure was used in relation to hypothesis nine: there will be a positive correlation between the superordinancy of the traumatised construct, and the psychological impact of the event as measured by the IES-R.

2.4.2 Hierarchical Classes Analysis (HICLAS, de Boeck, van Damme & van Mechelen, 1992).

### *Elaboration*

As previously mentioned, ideas about the elaboration of a traumatic event, or of the self before and after a traumatic event, have been central to the development of a personal construct psychology approach to understanding trauma. Different theorists and researchers have debated as to whether, when someone experiences psychological difficulties following a traumatic event, it is because the event, or self after the event, is **over** or **under**-elaborated. Elaboration refers to the degree to which the event or self has been made sense of, in terms of the depth and breadth of construing associated with it.

The HICLAS program provides a measure of the degree of elaboration of an element by providing a hierarchical analysis of the repertory grid data. Based on mathematical set theory it identifies overlapping and separate patterns (the relationships) within the elements and constructs. Using the assumption that an overlap of two or more lower order (subordinate) sets of elements or constructs implies an asymmetrical relationship with a higher order (superordinate) set, HICLAS is able to provide a final hierarchical representation of an individual's construct system. The more elaborated an element therefore, the higher the position it will adopt in the analysis.

The HICLAS model is dependent on the user choosing a 'rank', which determines the number of bottom sets that the hierarchical analysis will have. The rank size can vary from one to the total number of variables; however, the choice of rank is usually determined by the optimum utility and interpretability of it. It also involves a balance between low rank and goodness of fit (which improves with increasing rank) (Sporle, Winter & Rhodes, 2011). Previous research investigating trauma has used HICLAS structures at rank 4 (Sewell et al, 1996) and rank 5 (Winter and Gould, 2000). This research used HICLAS structures at rank 4.

The degree of elaboration was decided by looking at the level of an element within the HICLAS graphical output (with higher figures indicating a higher level of elaboration), and by looking at the number of constructs connected to an element (more constructs indicate a higher degree of elaboration).

The HICLAS programme was used to test hypothesis ten: there will be a negative correlation between the degree of elaboration of the self (either personal and/or professional) after the traumatic event, and the psychological impact of the event reported.

### 2.4.3 GRIDSTAT (Bell, 2004a)

#### *Conflict*

As previously mentioned some research has suggested that conflict within a person's construct system, that is when 'an element is at the same time similar or close to two constructs which are themselves different or distant' or 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, 2004a) can lead to psychopathology. Put more simply, if constructs are applied to an element in a different way compared to the way they are being applied to other elements, that element is believed to be more conflictual. Bell (2004a) cites an original example by Lauterbach to explain this concept: 'I like parties, I don't like depression, but alas I associate parties with depression' (p.54), where in this example the element is 'I' and the two constructs are going to parties or not and depressing or not. The program GRIDSTAT can be used to provide a measure of overall conflict in the grid and percentage of conflict associated with particular elements, and is thus being used in this research in relation to hypotheses six and seven.

6. There will be a positive correlation between overall conflict concerning the self (either personal and/or professional) after the event and the psychological impact of the event reported.

7. There will be a positive correlation between overall conflict concerning the person who committed suicide and the psychological impact of the event.

Conflictual relationships are said to be invalidating, because they do not fit with the person's other ways of construing and as highlighted in the Introduction, invalidation has been proposed to be linked to psychopathology.

### 2.4.4 *Extremity of ratings*

As discussed in the Introduction, some research has indicated a relationship between the extremity of ratings used by an individual in a grid and psychopathology. For the current study the percentage of extreme ratings, as calculated by adding up the number of 1's and 6's applied will be used to test hypotheses 11 and 12.

11. There will be a positive correlation between the number of extreme ratings in the whole grid, and the psychological impact of the event reported.

12. There will be a positive correlation between the number of extreme ratings applied to the element 'person who committed suicide', and the psychological impact of the event reported.

#### 2.4.5 Classification system for personal constructs (CSPC, Feixas, Gelschlager and Neimeyer, 2002).

As discussed in the Introduction, research has identified relationships between the content of construing and psychological responses to traumatic events. For the current research the classification system developed by Feixas et al. (2002) will be used to analyse all constructs used by all participants. The system comprises 45 categories for analysing constructs that have been elicited by methods such as the repertory grid technique. It is argued that using the system will complement quantitative methods of analysis such as those employed by this study. The 45 categories are further divided into six areas in a hierarchical order, meaning that constructs are only assigned once to the area occupying a higher level within the classification system. The six areas, presented in their hierarchical order are: (1) moral, (2) emotional, (3) relational, (4) personal, (5) intellectual/operational, and (6) values and interests. Two categories were later added to the system – (7) existential and (8) concrete descriptors. Both poles are considered together when classifying constructs, and examples for each category are provided by the authors.

Upon construction of the CSPC the reliability of the measure was rated by two independent judges who rated a total of 843 constructs using the measure. The authors reported that the total percentage of agreement between the judges was 87.3% (Feixas et al. 2002). They also state that in all 45 of the categories, the judges agreed in at least 66.7% of the cases. In the current research all constructs were rated by a second independent rater in order to check for reliability. There was a total percentage agreement of 62% between researcher and independent rater on classifications. Any discrepancies were discussed and agreement sought before a final classification was given.

The CPSC will be used to test hypotheses 13 and 14.

13. The number of emotional constructs will be negatively correlated with the psychological impact of the event reported.

14. The number of moral constructs will be positively correlated with the psychological impact of the event reported.

## 2.5 Semi-Structured Interview and Thematic Analysis

Completion of the follow-up semi-structured interview allowed a degree of methodological triangulation (Mason, 2002) to be carried out, adding depth and richness to the existing quantitative and qualitative analyses. The two participants involved were presented with their repertory grid and principal component analysis plot. Participants were then asked questions in relation to these findings informed by suggestions by Fransella et al. (2004). As the interview was designed to be semi-structured, although the researcher had a standard pool of questions, the order could be re-arranged to suit the participant, and other questions added in response to the participant's responses. The questions within the standard pool were selected to further explore the study's main research questions, focusing on how the participants saw themselves, others and the person who committed suicide. The development of the interview schedule was also influenced by the literature review. See Appendix 10 for the full interview schedule.

A thematic analysis of the semi-structured interview data was carried out. Thematic analysis was chosen because it allows for a more in depth analysis of participants' experience, and a search for central themes, yet is not tied to any specific philosophical positions, unlike other qualitative methods of analysis (such as Interpretative Phenomenological Analysis, which is attached to phenomenology) (Coolican, 2009). It is therefore a very flexible and accessible approach, ideal for identifying themes that can be related back to findings from the repertory grid measures. Thematic analysis therefore fits with the epistemological position adopted by the current researcher, that there is a reality, but that each individual has their own construction of this reality.

The steps of thematic analysis include familiarising oneself with the data, generating initial codes, and searching for, reviewing, defining and naming themes (Braun & Clarke, 2006). The themes identified by the analysis were then compared with the key findings of the repertory grid analysis for each participant. See Appendix 13 for an example of coding.

## 2.6 Data Analysis

The study assumed a non-parametric design based on the small sample size (N=15).

For the correlational hypotheses a Spearman's Rho correlation coefficient was therefore used. This is the method of analysis used for all the PCP hypotheses in the current study and for some of the questionnaire hypotheses where the data is at ordinal level.

For the questionnaire hypotheses, because most relate to data that is categorical or nominal in nature (i.e. whether the incident occurred in the dark, whether the driver attended coroner's court) it was decided that a Chi-square Test for independence would be employed to determine whether two categorical variables are related. Since the dependent variable (scores on the IES-R) was not originally categorical, in order to make the data simpler to analyse, it was decided to split the scores on the IES-R at the median value to create two categories of above and below the median.

For the hypotheses which give a predicted direction to the results, a one-tailed test would be employed. However, if no direction is predicted, or the results are in the opposite direction to that which was predicted, a two-tailed test would be used.

Data was originally collected in paper form and kept in a locked filing cabinet. Once all data was collected, data from the background questionnaire and IES-R was entered into an electronic spread sheet, and data from the repertory grids into the various computer programs, before being imported into SPSS in order to conduct the statistical analyses. All electronic data was password protected. All raw data will be destroyed after a period of five years (2018).

## 2.7 Ethical Considerations

Ethical approval for the study was granted by the University of Hertfordshire Ethics Committee in August 2012 (see Appendix 6). It was later decided that there needed to be an adaptation to the research design and that the IES-R should be administered twice, rather than the once for which approval was obtained. Final ethical approval following this minor adjustment was granted in January 2013 (see Appendix 6).

### *Consent*

Informed consent was sought from all participants. At the beginning of the meeting participants were given an information sheet (see Appendix 1) describing the key details of the study (purpose, intended methods, potential costs and benefits of participation, right to withdraw and confidentiality). They were given the opportunity to ask any questions relating to this information, and if happy to proceed they were asked to complete a consent form (see Appendix 2). On both the consent form and the information sheet, because participants were recruited via their place of work, it was deemed important by the researcher to explicitly state that refusal to take part in the study, or later withdrawal from the study, would not have any negative impact on their employment, thereby hoping to eliminate any sense of obligation to take part.

#### *Potential distress to participants*

It was highlighted in the information sheet that although previous research has indicated that taking part in trauma research can be therapeutic and beneficial, the researcher was aware that the research could also evoke distress. Participants were thus reminded that they could take a break, or stop completely at any time during the interview. The researcher also used their own clinical skills to identify if any participant appeared to be experiencing distress during the interview and manage this appropriately. Participants were also provided with time to debrief following the interview (see Appendix 3), and given a list of additional sources of support (see Appendix 4) should they require this at a later date.

#### *Confidentiality*

Confidentiality was maintained at all times. Each participant was asked to provide the researcher with a numeric unique identifier so that participant names were not present on the data, but the researcher could easily remove a participant's data if requested. When writing up the research pseudonyms were used for the case studies and all identifying information removed.

## CHAPTER THREE: RESULTS

This section will begin with a detailed description of the demographics of the sample. Then the chapter will go on to address the main research question, first by addressing hypotheses related to overall grid indices and IES-R scores, then hypotheses related to particular aspects of the grids. The chapter will then move to a content analysis of the constructs used, focusing particularly on those applied by participants to the person who committed suicide. There will then be a detailed presentation of two participants' results, followed by a thematic analysis of the semi-structured interviews carried out with these participants.

### 3.1 Post-hoc power calculation

Unfortunately, although during the proposal stage for the current research the potential number of participants looked promising, and despite the researcher spending a significant amount of time on recruitment, the final sample size achieved was only 15 participants.

It was therefore decided that there would not be sufficient numbers in each of the groups in relation to the demographic questionnaire data, in order to carry out the planned statistical analyses of a Chi-Square Test of association. Only descriptive statistics regarding the data collected from these questionnaires will therefore be presented.

In terms of the correlational analyses, in view of this small sample size, a post-hoc power calculation was conducted in GPower 3.1 to determine the level of power this study had to detect a Pearson correlation of  $r = .40$ , which was regarded to be a minimum effect size of practical significance. The results showed that the power to reject the Null-Hypothesis  $\rho = 0$  was only .60 using an alpha level of 10% (one-tailed). The study therefore had not enough statistical power and to raise the power to .80, a sample size of  $N = 27$  would be required. This limitation of the research will be considered further in the Discussion section.

### 3.2 Demographic Information

This section includes information obtained from the background questionnaire that was completed by each participant. This information is summarised in Table 1.0 using descriptive statistics.

Table. 1. Summary of Demographic Information

Information		Overall sample (n=15)
<b>Age</b>	Mode	40-49 years
	Minimum	30 years
	Maximum	59 years
<b>Gender</b>	Male	14 (93.3%)
	Female	1 (6.7%)
<b>Ethnicity</b>	White British	15 (100%)
<b>Marital Status</b>	Married/cohabiting	13 (86.7%)
	Separated/divorced	2 (13.3%)

In 2012 the Associated Society of Locomotive Engineers and Firemen (ASLEF) commissioned an independent report into the lack of diversity in the British railway industry, stating that ‘most train drivers are white, middle-aged men’ (Robison, 2012, p.4). The report stated that ‘only 4.2% of train drivers are women and only 4.9% are from BEM (black and ethnic minority) communities’ (Robison, 2012, p.4). The relatively homogenous male, white, middle-aged sample achieved in the current research was therefore considered fairly representative of the train driver population in Britain.

### 3.3 Incident specific information

This section includes information obtained from the background questionnaire that was completed by each participant. Due to small sample size, statistical analyses have not been able to be completed on these data. This information is therefore summarised in Table 2.0 using descriptive statistics.

Table 2. Summary of Incident Specific Information

<b>Information</b>		<b>Overall sample (n=15)</b>	
<b>Number of suicides witnessed</b>	Mean		1.4
	Minimum		1
	Maximum		3
	SD		0.70
<b>Time since most recent suicide (years)</b>	Mean		6.8
	Minimum		<1
	Maximum		21
	SD		6.71
<b>Length of time off work (months)</b>	Mean		1.73
	Minimum		<1
	Maximum		7
	SD		1.53
<b>Time spent alone post incident (minutes)</b>	Mean		22
	Minimum		0
	Maximum		120
	SD		35.09
<b>Number of suicides that occurred in the dark</b>			7 (47%)
<b>Medical tests carried out</b>			1 (0.06%)
<b>Attended coroners court</b>			10 (67%)
<b>Interviewed by the BTP</b>			13 (87%)

<b>Received workplace support</b>	11 (73%)
<b>Found support systems helpful</b>	10 (67%)
<b>Received professional help</b>	10 (67%)
<b>Given a diagnosis of PTSD following the incident.</b>	5 (33%)

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### 3.4 Frequencies of scores from the IES-R past and present.

The maximum possible score on the IES-R is 88, and higher scores are thought to indicate greater psychological distress. Ten out of the 15 participants had a total past IES-R score above 30. Although not an official cut-off point, it is of clinical significance to note that scores above 30 on the IES-R have been referred to in the literature as reflecting significant distress (Creamer et al. 2003). This figure reduced to 1 participant on the present IES-R measure. The minimum past IES-R score was 4 and the maximum 68. The minimum present IES-R score was 0 and the maximum 39. The large range in both past and present IES-R scores can partly be explained by the large range in time passed since the incident within the sample, as some recovery would be expected over time.

Figure 1 represents the frequencies of total past and present scores from the IES-R. It shows that the median past IES-R score is greater than the median present IES-R score. A Wilcoxon (T) matched pairs signed ranks test found that this difference was significant ( $z = 3.408$ ,  $N - \text{ties} = 15$ ,  $p < 0.001$ , two-tailed). The effect size was large,  $d = 1.60$ . Therefore participants scored significantly lower on the present measure of the IES-R, than on the past measure of the IES-R, suggesting as predicted, that for most participants their distress reduced over time.

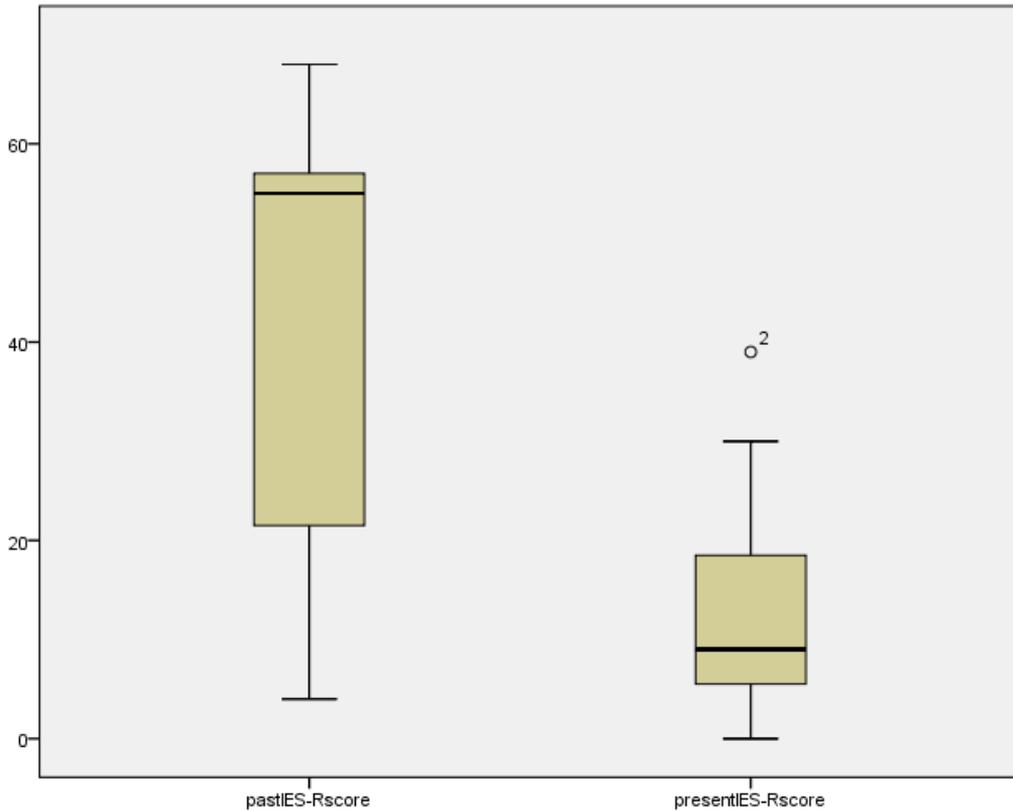


Figure 1: Boxplot showing the medians and distributions of scores on the IES-R for both past and present (N = 15).

### 3.5 IES-R Subscale Analysis

The IES-R comprises of three sub-scales, intrusion, hyperarousal and avoidance. The results of the subscale analysis for this sample provide potentially interesting information about the particular type of psychological impact experienced by this group. Scores on the subscales can range from 0 through to 4, and a score of around 2 suggests that participants' distress from the symptoms was moderate. Of the 15 participants, eleven had at least one subscale score above 2 on the past measure of the IES-R, suggesting significant distress. This reduced to 3 participants on the present measure of the IES-R. Descriptive statistics relating to the subscale analysis are presented in Tables 3 and 4.

Table 3. Summary of sub-scale descriptive statistics for past scores on the IES-R.

	<b>Intrusion</b>	<b>Hyperarousal</b>	<b>Avoidance</b>
<b>Mean</b>	2.47	1.75	1.36

<b>Median</b>	2.88	2.50	1.38
<b>Minimum</b>	0.25	0.00	0.25
<b>Maximum</b>	3.75	3.17	2.50
<b>Skewness</b>	-.817	-.369	.103
<b>Standard Deviation</b>	1.15	1.33	0.84

Table 4. Summary of sub-scale descriptive statistics for present scores on the IES-R.

	<b>Intrusion</b>	<b>Hyperarousal</b>	<b>Avoidance</b>
<b>Mean</b>	0.89	0.18	0.59
<b>Median</b>	0.88	0.00	0.25
<b>Minimum</b>	0.00	0.00	0.00
<b>Maximum</b>	3.00	1.33	2.13
<b>Skewness</b>	1.44	2.45	1.23
<b>Standard Deviation</b>	1.15	0.39	0.74

As can be seen from the tables it is of interest to note that the mean and median scores for both past and present on the intrusion subscale, are higher than the mean and median scores for the hyperarousal and avoidance subscales. Figure 2 provides a visual representation of the distribution of these scores.

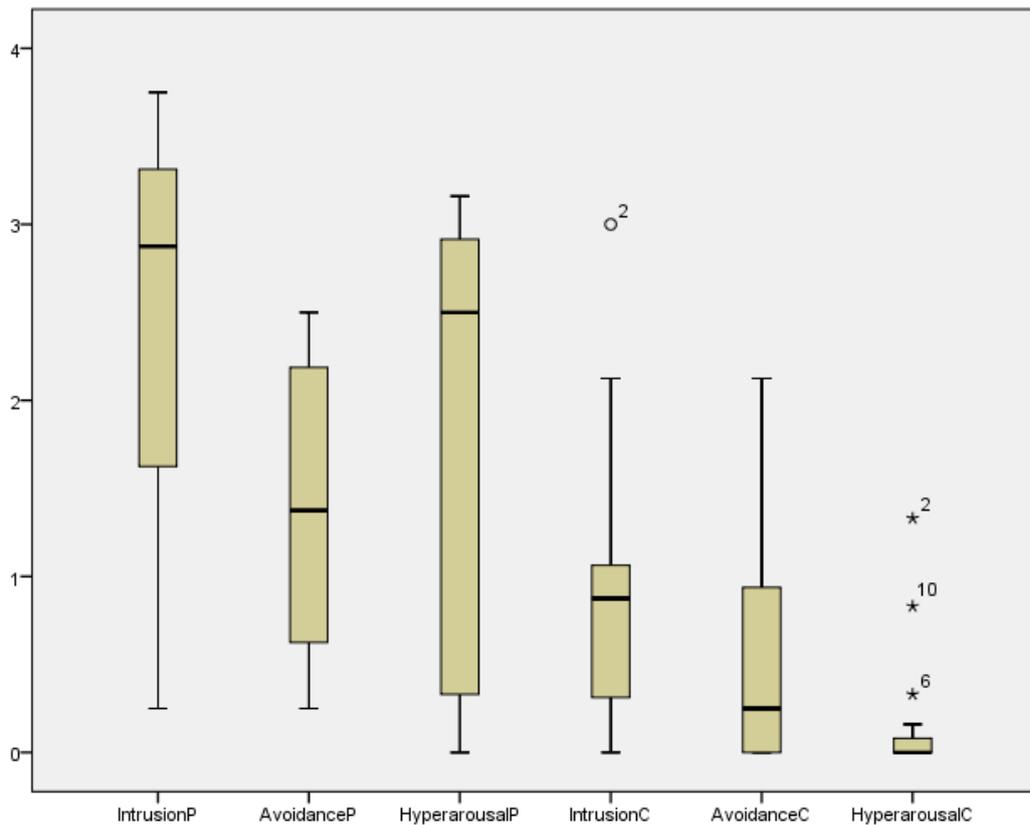


Figure 2: Boxplot showing the medians and distributions of subscale scores on the IES-R for both past (P) and present (C) (N = 15).

As can be seen in Figure 2 the distributions of scores across the subscales for the past measure of the IES-R appear to be largely symmetrical. However, the distributions of scores across the subscales for the present measure of the IES-R appear to differ quite significantly. The distribution of scores on the hyperarousal subscale is skewed, and includes three extreme cases, and for that reason present hyperarousal subscale scores were not included in the statistical comparison of the subscales.

A Related Samples Friedman's Two Way Analysis of Variance by Ranks was conducted on the subscale scores.

It was found that the distributions of Intrusion, Hyperarousal and Avoidance scores for the past measure of the IES-R were significantly different, ( $\chi^2(2) = 15.298, p < 0.000$ ). A Wilcoxon (T) matched pairs signed ranks test found that intrusion subscale scores were significantly higher than the subscale score for the avoidance subscale ( $z = 3.298, N - \text{ties} = 14, p < 0.001$ , two-

tailed). The effect sizes was large at  $d = 0.85$ . Participants therefore scored significantly higher in terms of intrusion symptoms, compared to avoidance symptoms.

Distributions of Intrusion, Hyperarousal and Avoidance scores for the present measure of the IES-R were also significantly different ( $\chi^2 (2) = 18.157, p < 0.000$ ). As previously stated the hyperarousal subscale was not included in the subsequent analysis due to the level of skewness and number of extreme cases in the data. A Wilcoxon (T) matched pairs signed ranks test found no significant difference between the present intrusion subscale scores and the present avoidance subscale scores ( $z = 1.365, N - \text{ties} = 13, p = .172$ ).

### 3.6 Testing the hypotheses

#### 3.6.1 Bi-variate analyses between past and present IES-R scores, and overall repertory grid indices.

Hypothesis: The degree of tightness of construing will correlate positively with scores on the IES-R.

There was no correlation between the degree of tightness of construing (as measured by the percentage of variance accounted for by the first principal component) and the past score on the IES-R ( $r_s = -.113, n = 15, p = .689, 2\text{-tailed}$ ). Therefore the measure of degree of tightness of construing was not associated with the past score on the IES-R. This is represented graphically in Figure 3.

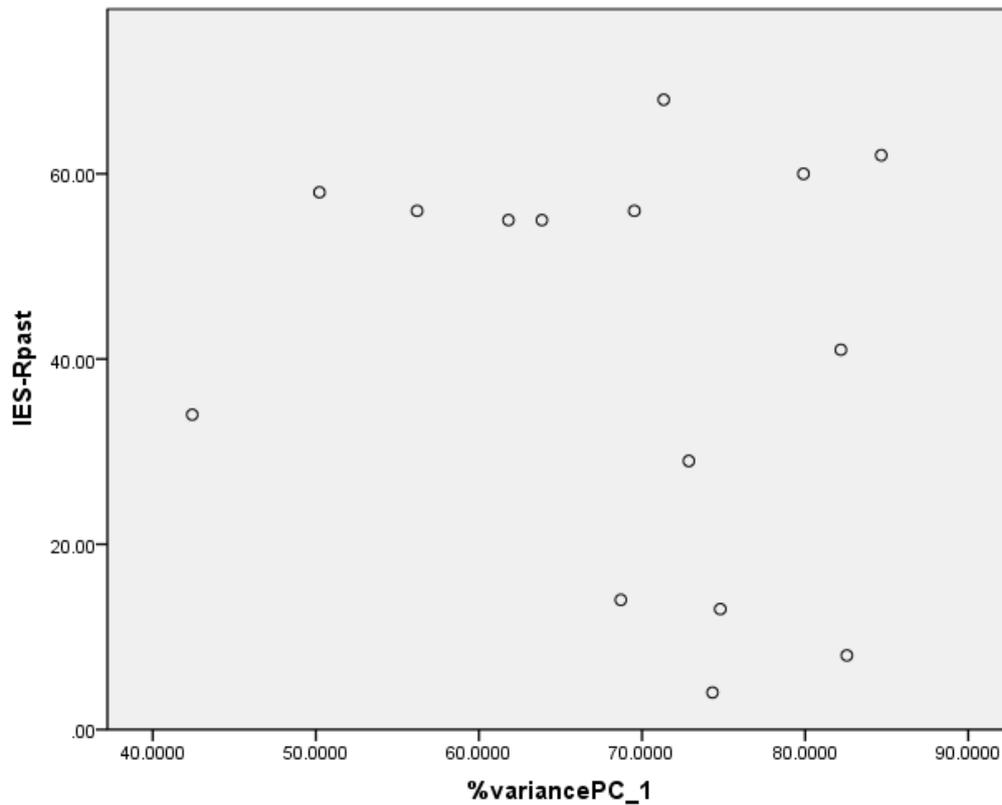


Figure 3: A scatterplot showing no relationship between tightness of construing and past score on the IES-R.

There was no correlation between the degree of tightness of construing (as measured by the percentage of variance accounted for by the first principal component) and the present score on the IES-R ( $r_s = -.386$ ,  $n = 15$ ,  $p .156$ , 2-tailed). Therefore the measure of degree of tightness of construing was not associated with participants' present score on the IES-R. This is represented graphically in Figure 4.

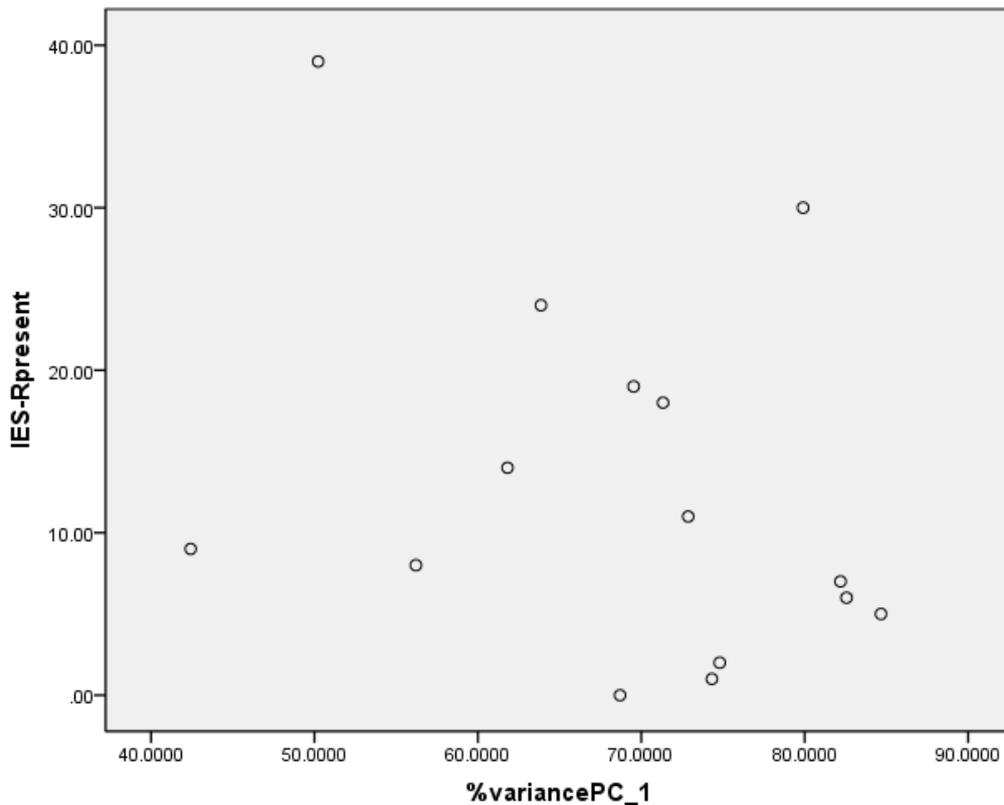


Figure 4: A scatterplot showing no relationship between degree of tightness of construing and present IES-R score.

Although the above correlation did not reach statistical significance, it is of clinical significance to note that the scatterplot above appears to demonstrate a negative relationship between the degree of tightness of construing and participants' present IES-R scores. This is in the opposite direction to what was predicted. The correlation coefficient is itself a measure of effect size (Coolican, 2009) and therefore a result of  $-.386$  suggests that there was a moderate effect, but that the power achieved by the small sample size was not strong enough to detect it. This therefore supports the interpretation of the scatterplot.

Hypothesis: There will be a positive correlation between the number of extreme ratings used in the repertory grid and the scores on the IES-R.

The average number of extreme ratings applied to the whole grid in this sample was 41. The minimum number of extreme ratings used in a single grid was 12, and the maximum 70. The standard deviation was 16.01.

There was no correlation between the number of extreme ratings and either the past or present score on the IES-R (past =  $r_s = .106$ ,  $n = 15$ ,  $p .354$ , 1-tailed) (present =  $r_s = -.373$ ,  $n = 15$ ,  $p .171$ , 2-tailed). Therefore the measure of extremity of ratings was not associated with participants' scores on the IES-R. These results are represented graphically in Figures 5 and 6.

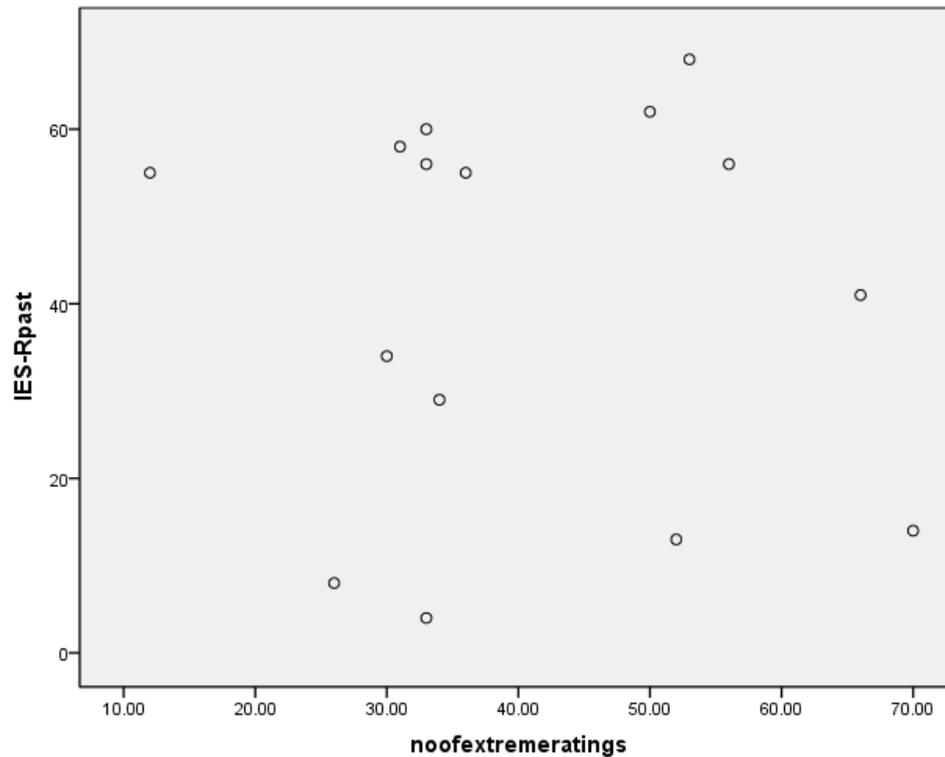


Figure 5. A scatterplot showing no relationship between extremity of ratings and past score on the IES-R.

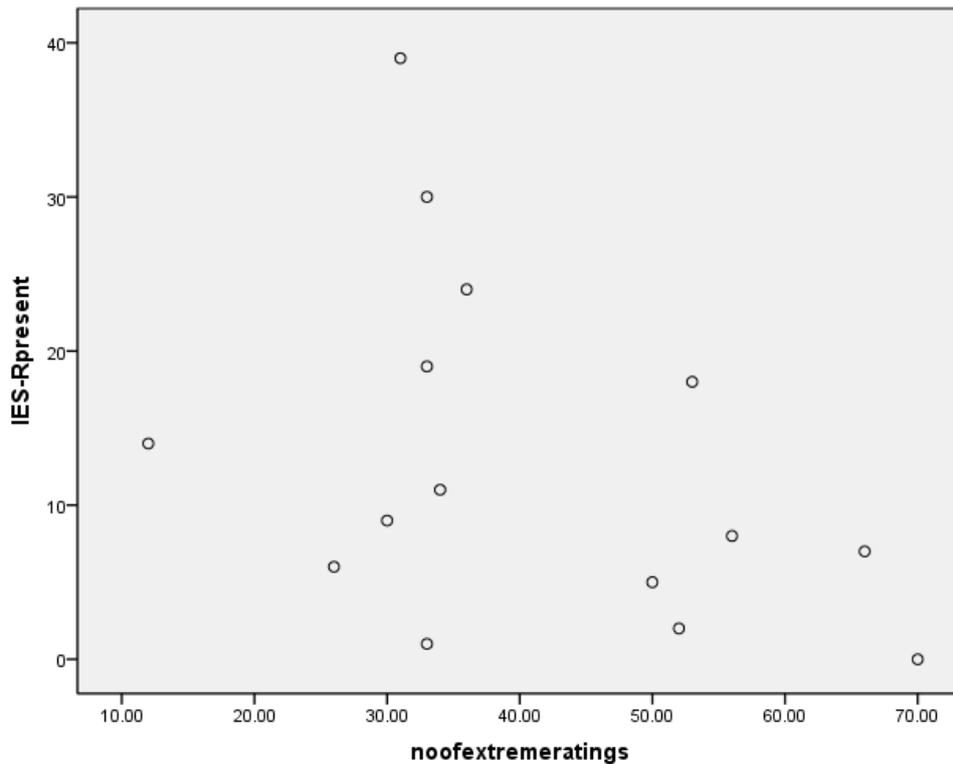


Figure 6. A scatterplot showing no relationship between number of extreme ratings and present scores on the IES-R.

Although the above correlation did not reach statistical significance, it is of clinical significance to note that the scatterplot above appears to demonstrate a negative relationship between the number of extreme ratings and present scores on the IES-R, this is in the opposite direction to what was predicted. As previously mentioned a correlation coefficient of  $-.373$  suggests that there was a moderate effect, but that the power achieved by the small sample size was not strong enough to detect it. This therefore supports the interpretation of the scatterplot.

Hypothesis: There will be a positive correlation between the number of extreme ratings applied to the person who committed suicide and the scores on the IES-R.

The average number of extreme ratings applied to the person who committed suicide in this sample was 8. The minimum number of extreme ratings used in a single grid was 5, and the maximum 11. The standard deviation was 1.69.

There was no correlation between the number of extreme ratings and either the past or present score on the IES-R (past =  $r_s = -.011$ ,  $n = 15$ ,  $p = .969$ , 2-tailed) (present =  $r_s = -.083$ ,  $n = 15$ ,  $p$

.768, 2-tailed). Therefore the measure of extremity of ratings applied to the person who committed suicide was not associated with participants' scores on the IES-R. These results are represented graphically in Figures 7 and 8.

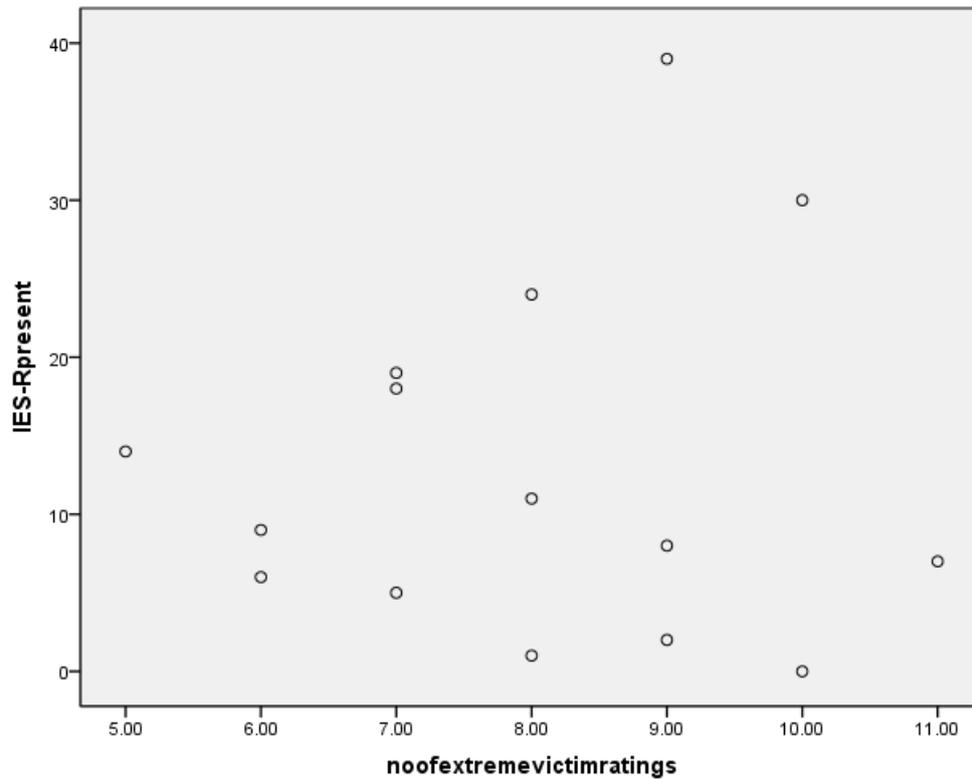


Figure 7. A scatterplot showing no relationship between the number of extreme ratings applied to the person who committed suicide and current scores on the IES-R.

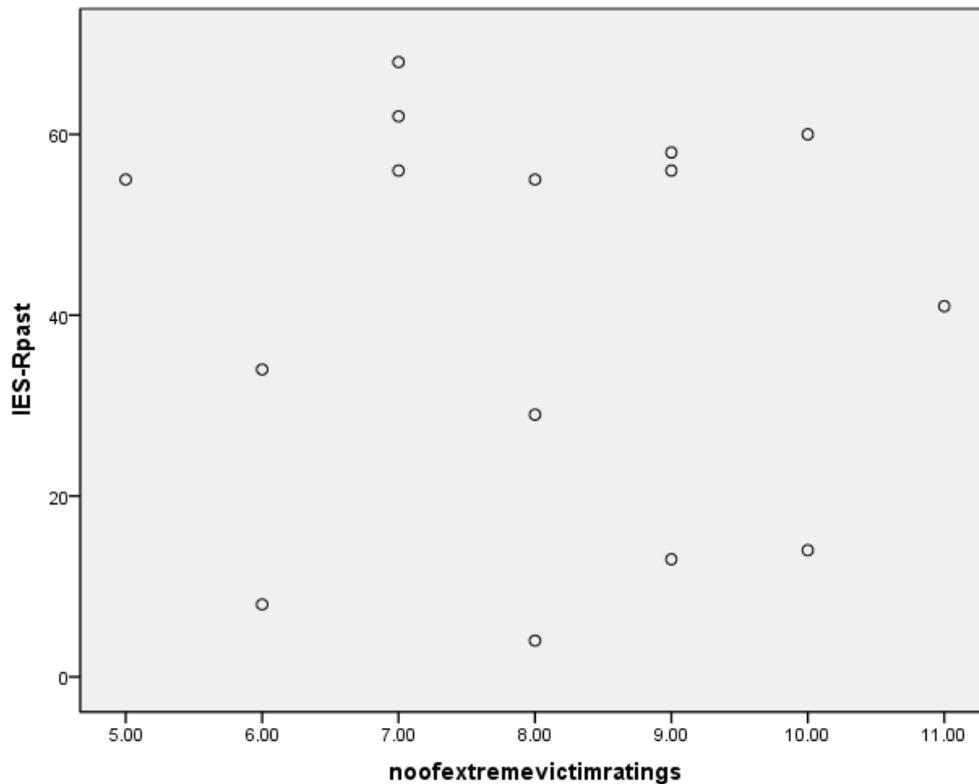


Figure 8. A scatterplot showing no relationship between the number of extreme ratings applied to the person who committed suicide and past IES-R scores.

### 3.6.2 Bi-variate analyses involving aspects of the grid related to individual elements and/or constructs.

It should be noted that when completing the repertory grid participants appeared to find it hard to distinguish between the elements personal and professional self, and this is supported by the results for these elements being similar. Therefore results regarding the element professional self will only be presented when they differ (in terms of achieved significance and direction of the results) from those for the element personal self.

Hypothesis: The superordinancy of the traumatised construct will be positively correlated with scores on the IES-R.

There was a significant negative correlation between the relative superordinancy of the construct ‘traumatised’ and both past ( $r_s = -.519$ ,  $n = 15$ ,  $p .048$ , 2-tailed) and present ( $r_s = -.539$ ,  $n = 15$ ,  $p .038$ , 2-tailed) scores on the IES-R. Thus, the more superordinate a position the

construct 'traumatised' occupied in participants' construct systems, the lower their score on the IES-R. This is the opposite direction to what was predicted. These results are represented graphically in Figures 9 and 10.

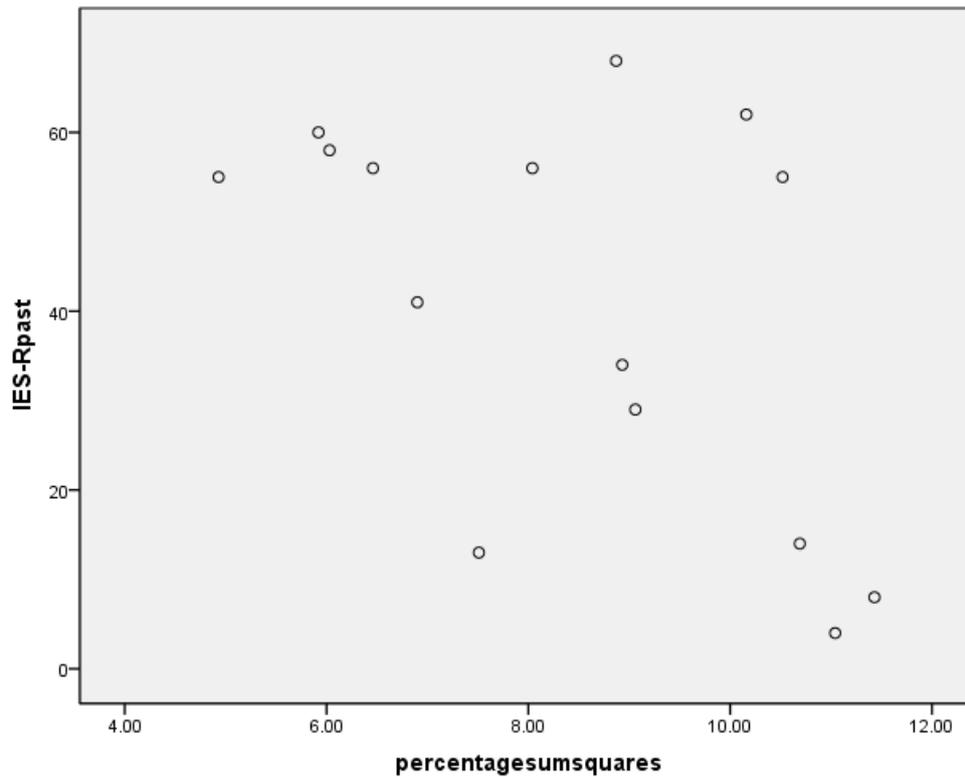


Figure 9. A scatterplot showing a negative correlation between superordinancy of the construct 'traumatised' and past scores on the IES-R.

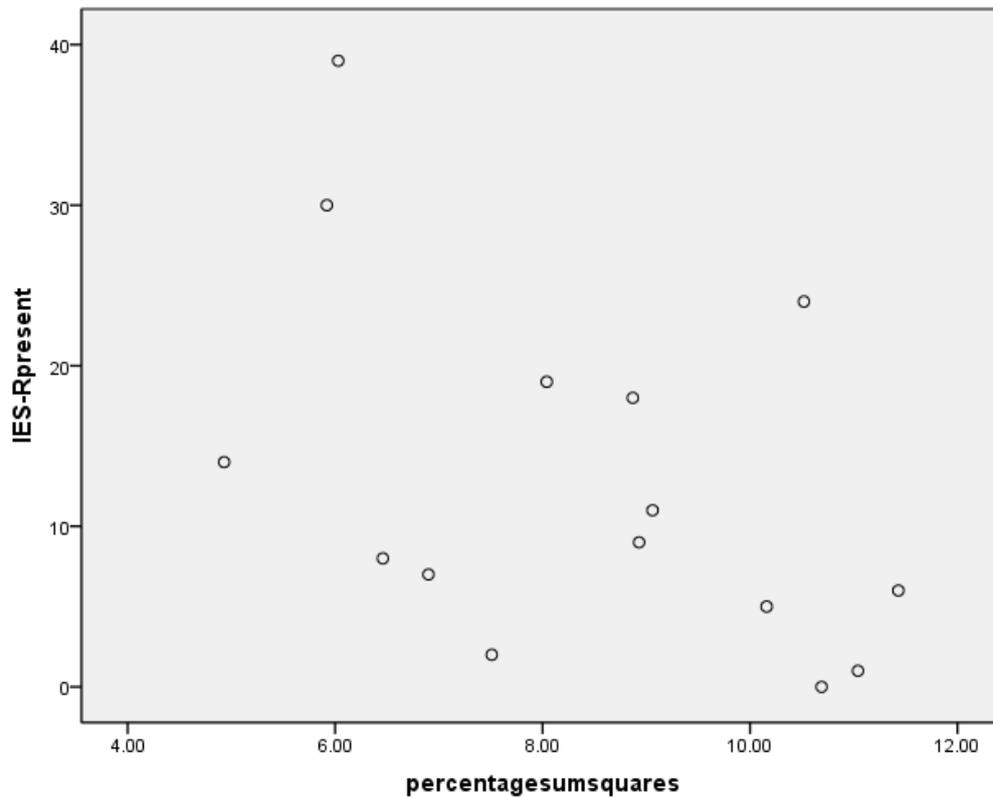


Figure 10. A scatterplot showing a negative correlation between relative superordinancy of the ‘traumatised’ construct and participants present scores on the IES-R.

Hypothesis: There will be a positive correlation between conflict concerning the person who committed suicide and participants’ scores on the IES-R.

There was no correlation between the percentage of conflict attributed to the person who committed suicide, and participants’ scores on either the past ( $r_s = -.360$ ,  $n = 15$ ,  $p .188$ , 2-tailed) or present ( $r_s = .079$ ,  $n = 15$ ,  $p .390$ , 1-tailed) measure of the IES-R. These results are represented graphically in Figures 11 and 12.

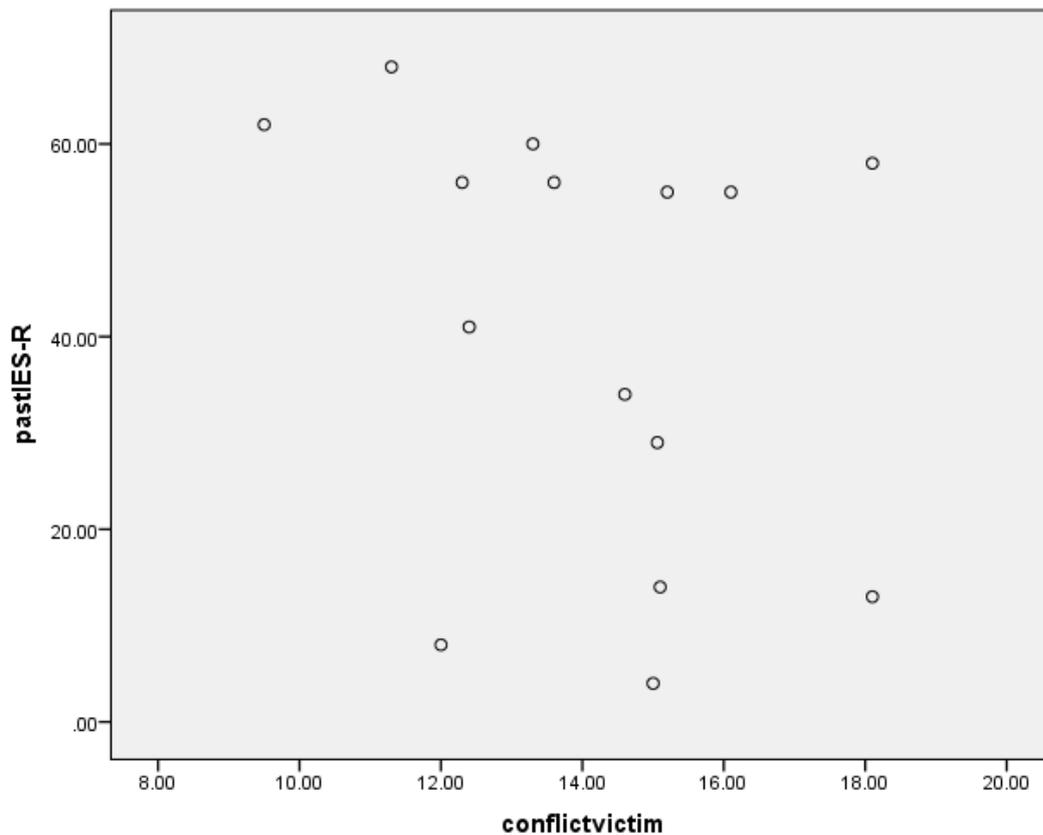


Figure 11. A scatterplot showing no relationship between the percentage of conflict attributed to the person who committed suicide, and participants' past scores on the IES-R.

Although the correlation did not reach statistical significance, it is of clinical significance to note that the scatterplot above appears to demonstrate a negative relationship between the percentage of conflict attributed to the person who committed suicide and participants' past scores on the IES-R. This is the opposite direction to what was predicted. As previously mentioned a correlation coefficient of  $-.360$  suggests that there was a moderate effect, but that the power achieved by the small sample size was not strong enough to detect it. This therefore supports the interpretation of the scatterplot.

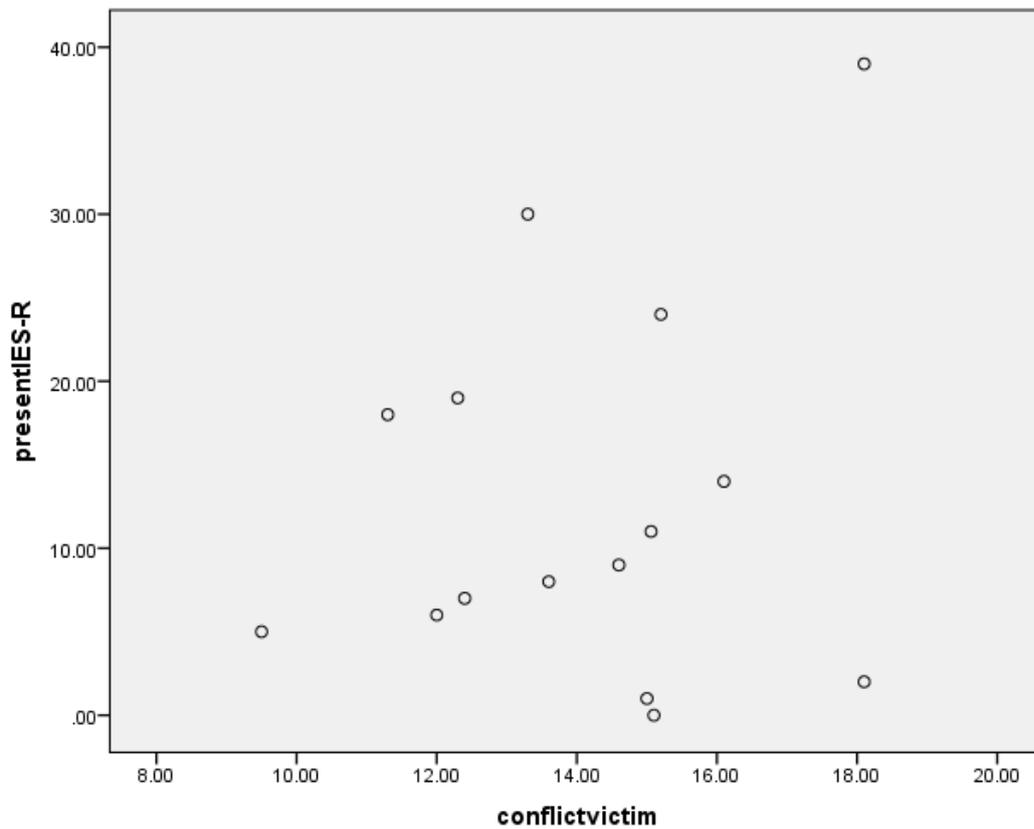


Figure 12. A scatterplot showing no relationship between the percentage of conflict attributed to the person who committed suicide, and participants' present scores on the IES-R.

Hypothesis: There will be a positive correlation between conflict concerning the self after the event (current personal or professional self) and the IES-R scores.

There was no significant correlation between the percentage of conflict attributed to the self after the event (current personal self), and participants' scores on either the past ( $r_s = .086$ ,  $n = 15$ ,  $p = .380$ , 1-tailed) or present ( $r_s = .000$ ,  $n = 15$ ,  $p = .500$ , 1-tailed) measure of the IES-R. These results are represented graphically in Figures 13 and 14.

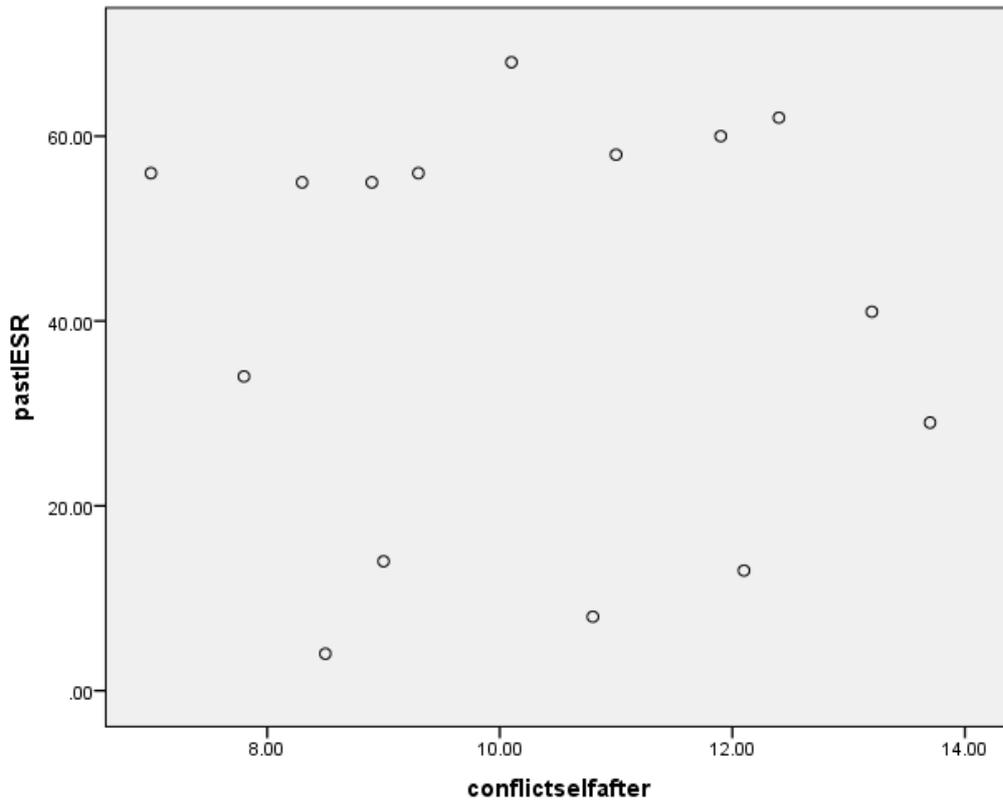


Figure 13. A scatterplot showing no relationship between the percentage of conflict attributed to the current self, and participants' past scores on the IES-R.

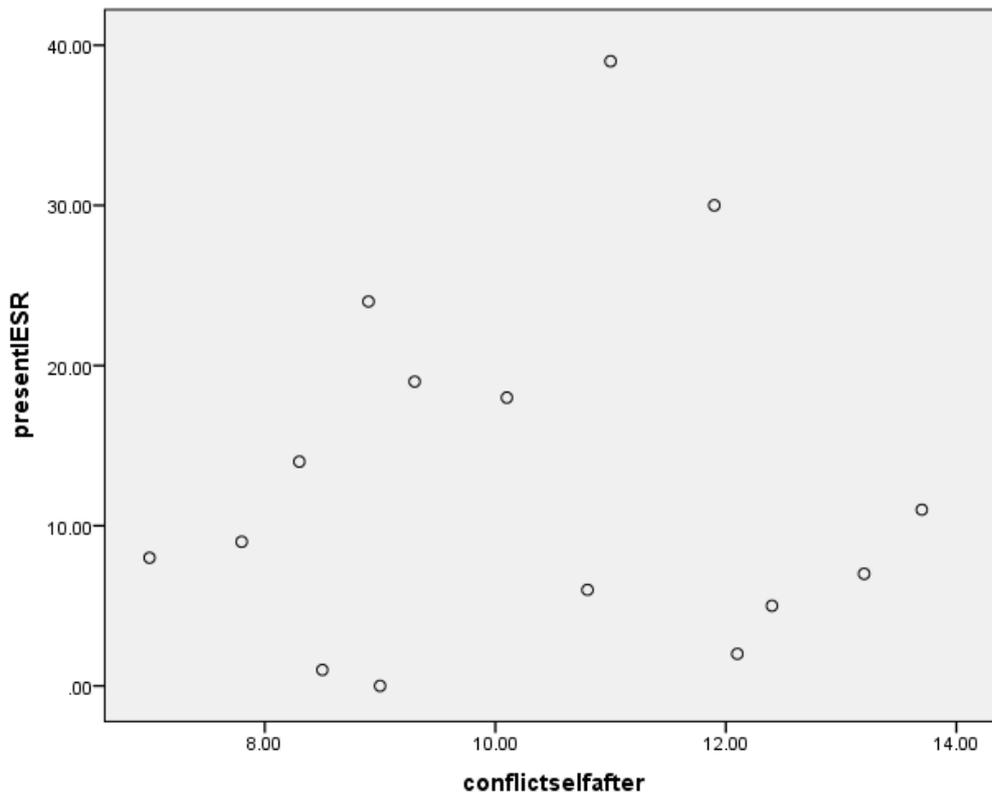


Figure 14. A scatterplot showing no relationship between the percentage of conflict attributed to the current self, and participants' present scores on the IES-R.

Hypothesis: The degree of the elaboration of the self after the event (either personal or professional) will be negatively correlated with scores on the IES-R.

There was no significant correlation between the degree of elaboration of the self after the event (the current personal self) and either past ( $r_s = -.139$ ,  $n = 15$ ,  $p .311$ , 1-tailed) or present ( $r_s = -.208$ ,  $n = 15$ ,  $p .228$ , 1-tailed) scores on the IES-R. These results are represented graphically in Figures 15 and 16.

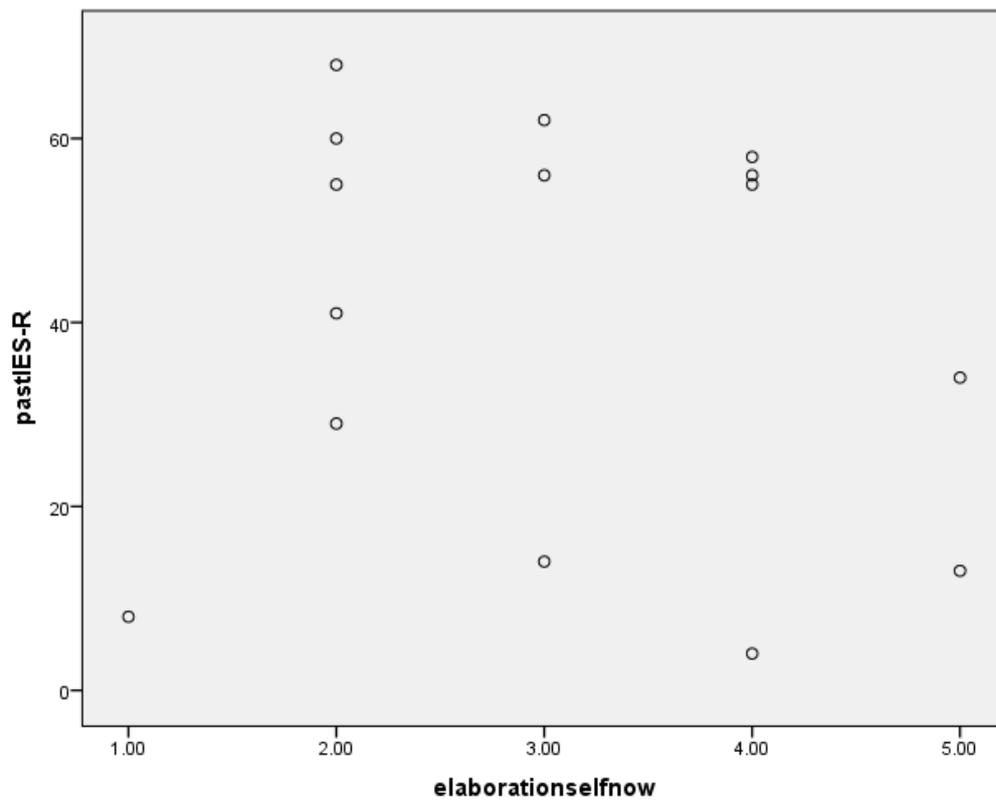


Figure 15. A scatterplot showing no relationship between the degree of elaboration of the current self, and participants' past scores on the IES-R.

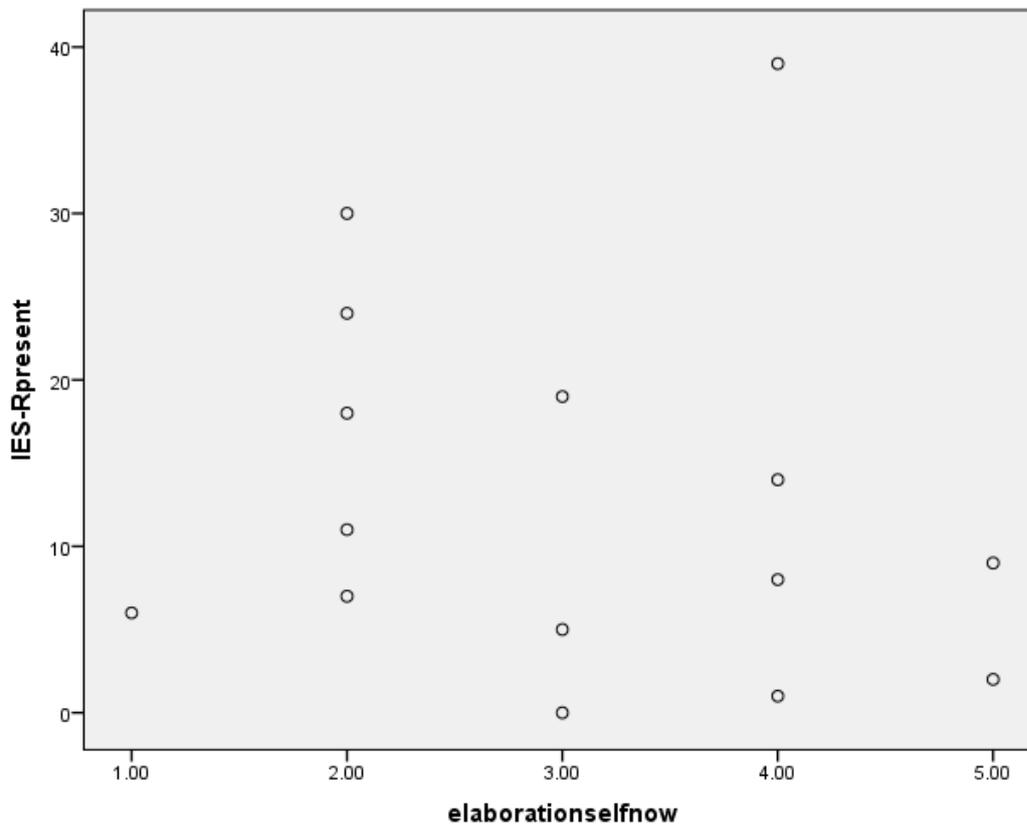


Figure 16. A scatterplot showing no relationship between the degree of elaboration of the current self, and participants' present scores on the IES-R.

### 3.6.3 Bi-variate analyses involving Euclidean distances and scores on the IES-R.

Hypothesis: Dissimilarity in the construing of the self before the event (personal or professional), and the self after the event (current personal or professional self) will be positively correlated with scores on the IES-R.

There was no significant correlation between dissimilarity in the construing of the personal self before the event and the personal self after the event on either past ( $r_s = .251$ ,  $n = 15$ ,  $p.184$ , 1-tailed) or present scores ( $r_s = .368$ ,  $n = 15$ ,  $p.088$ , 1-tailed). These results are represented graphically in Figures 17 and 18.

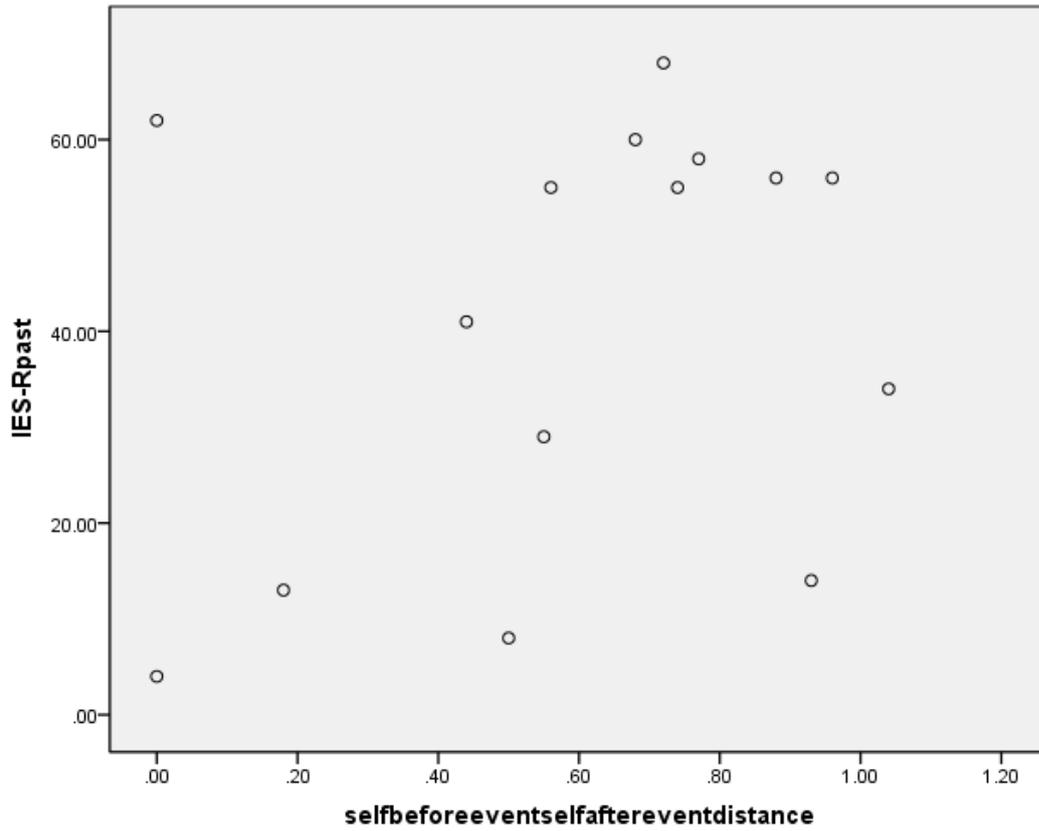


Figure 17. A scatterplot showing no relationship between the standardised Euclidean distance of self before the event and self after the event, and participants' past IES-R scores.

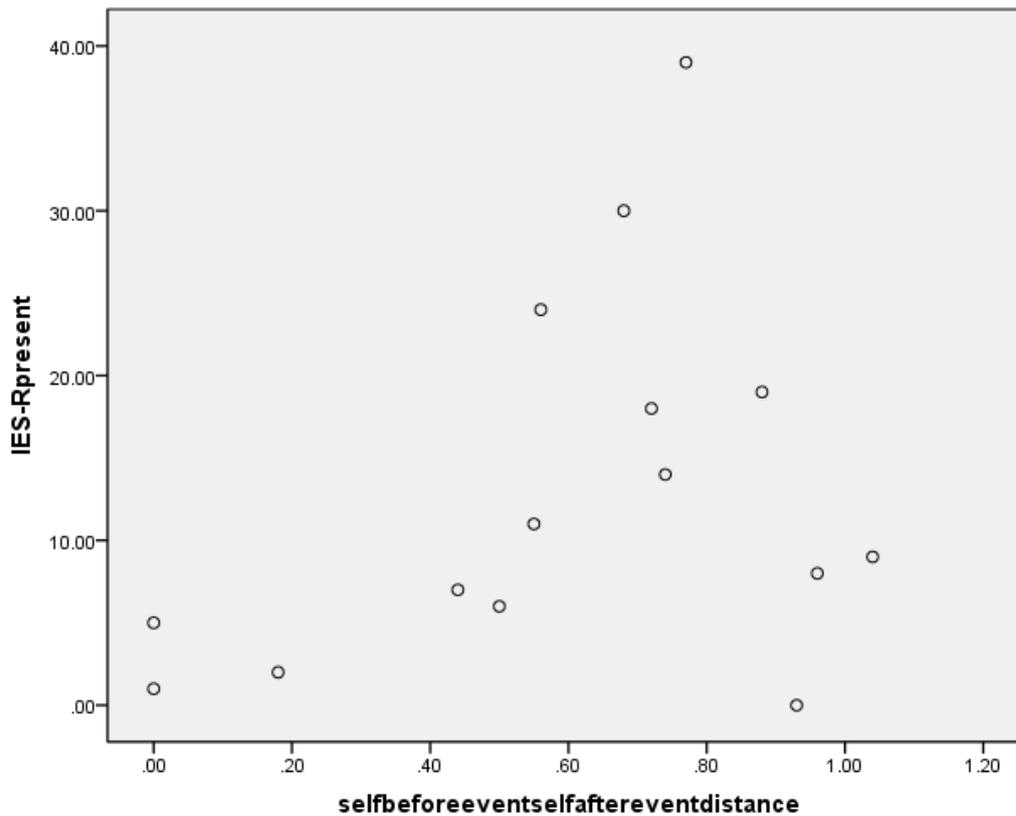


Figure 18. A scatterplot showing no relationship between the standardised Euclidean distance of self before the event and self after the event, and participants' present IES-R scores.

Although the above correlation did not reach statistical significance, it is of clinical significance to note that the scatterplot above appears to demonstrate a positive relationship between dissimilarity in the construing of the self before the event and the self after the event, and present scores on the IES-R. As previously mentioned a correlation coefficient of .368 suggests that there was a moderate effect, but that the power achieved by the small sample size was not strong enough to detect it. This therefore supports the interpretation of the scatterplot, and as a result, the hypothesis.

Hypothesis: Dissimilarity in the construing of the current self (personal or professional) and the ideal self will be positively correlated with scores on the IES-R.

There was no significant correlation between dissimilarity in the construing of the self after the event (current personal self) and the ideal self in terms of past scores on the IES-R ( $r_s = .197$ ,  $n = 15$ ,  $p = .241$ , 1-tailed). There was however a significant positive correlation between dissimilarity in the construing of the current personal self and the ideal self and present scores

on the IES-R ( $r_s = .471$ ,  $n = 15$ ,  $p.038$ , 1-tailed). These results are represented graphically in Figures 19 and 20.

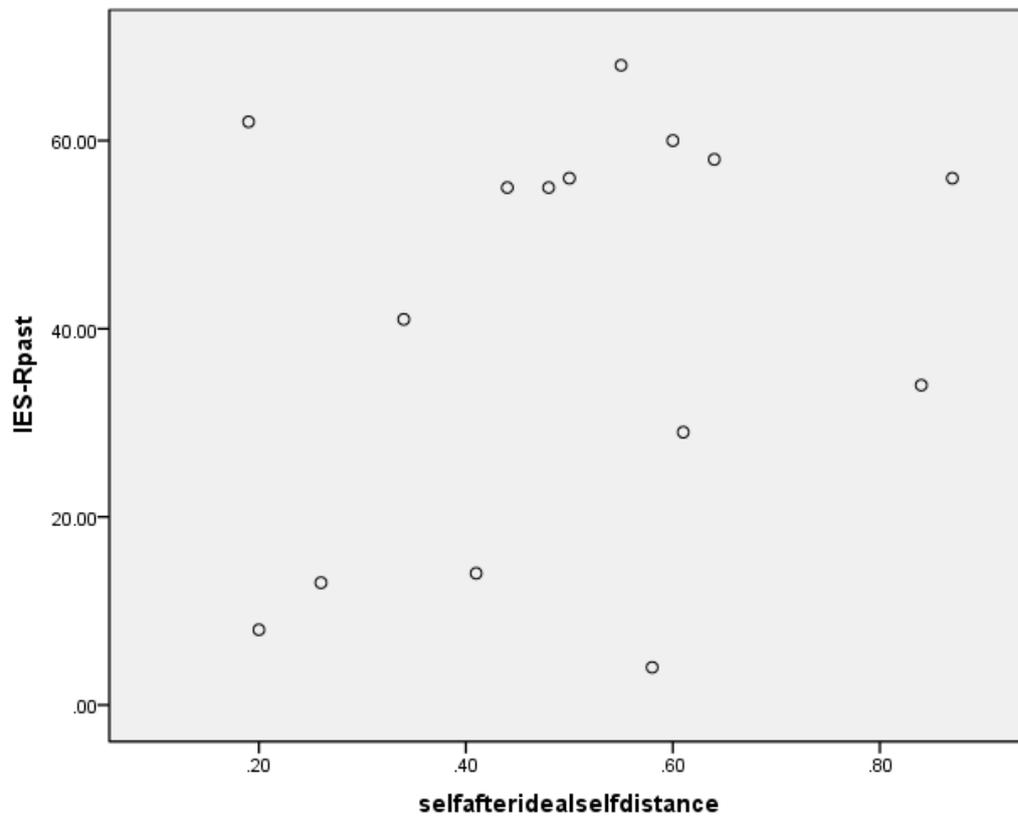


Figure 19. A scatterplot showing no correlation between the standardised Euclidean distance of self after the event and ideal self, and participants' past IES-R scores.

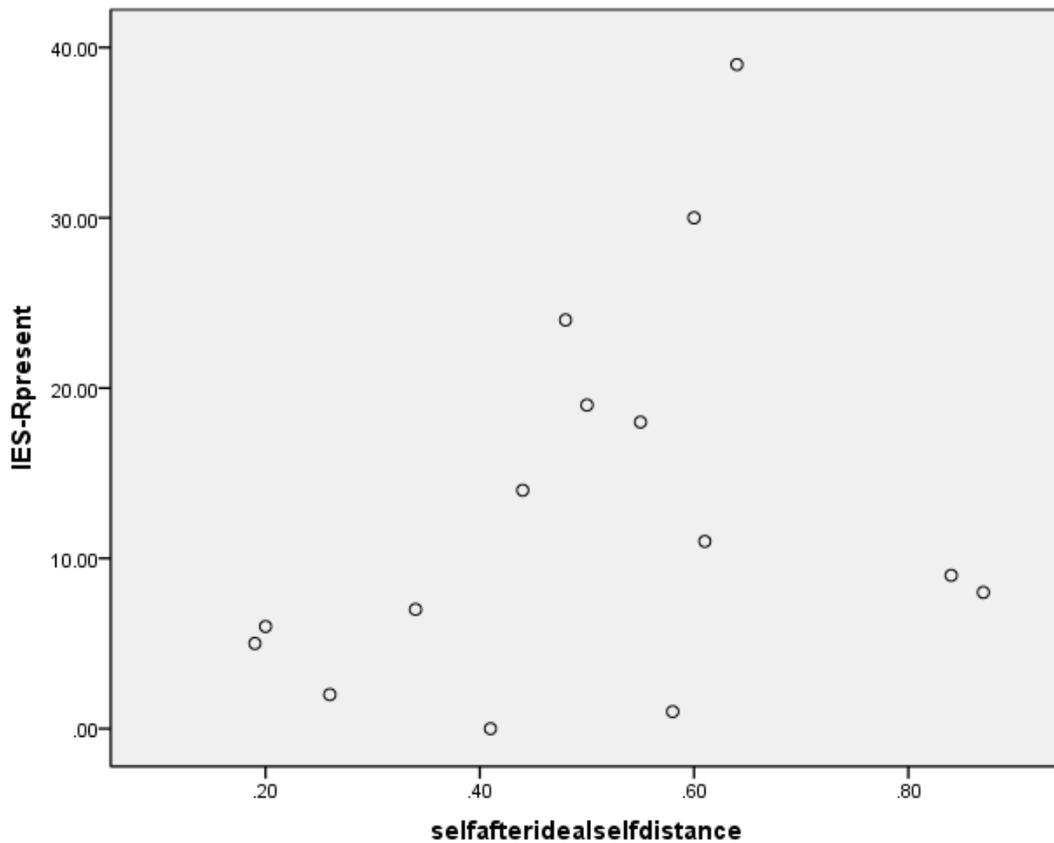


Figure 20. A scatterplot showing a significant positive correlation between the standardised Euclidean distance of self after the event and ideal self, and participants' present IES-R scores.

Hypothesis: Dissimilarity in the construing of the current self (personal or professional) and other train drivers who have not witnessed a railway suicide, will be positively correlated with scores on the IES-R.

There was no significant correlation between dissimilarity in the construing of the self after the event (current personal self) and drivers who had not witnessed a railway suicide and either past ( $r_s = .173$ ,  $n = 15$ ,  $p.269$ , 1-tailed) or present IES-R scores ( $r_s = .372$ ,  $n = 15$ ,  $p.086$ , 1-tailed). These results are represented graphically in Figures 21 and 22.

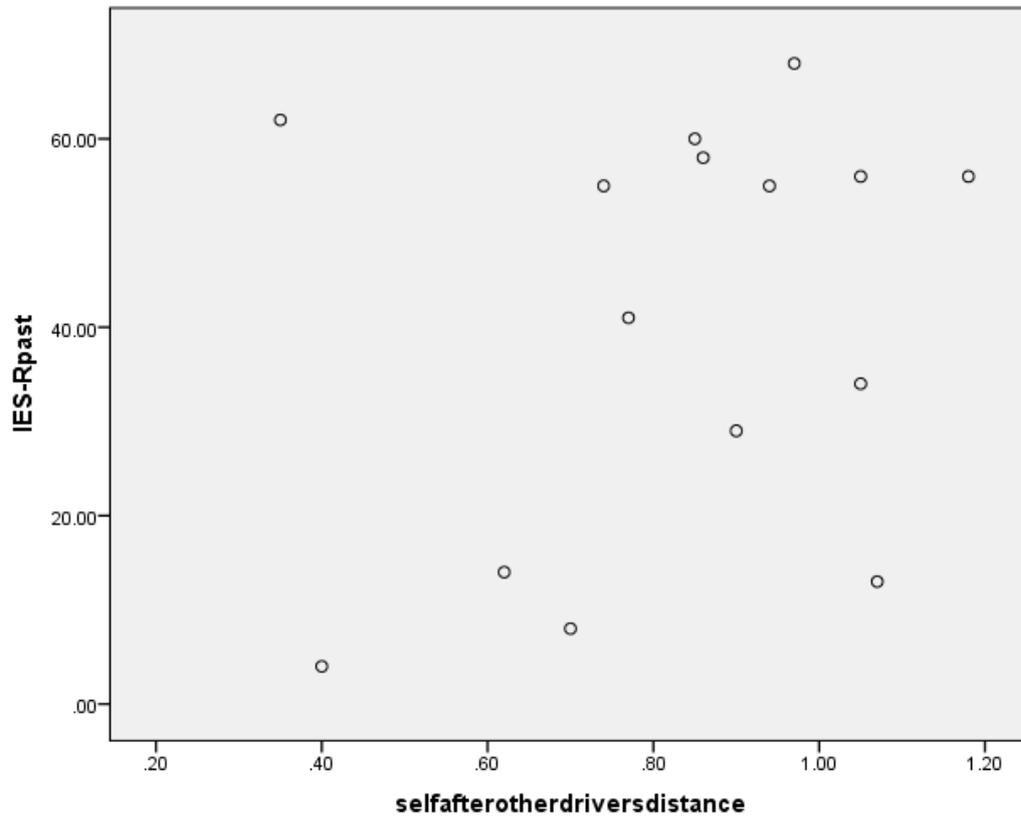


Figure 21. A scatterplot showing a no relationship between the standardised Euclidean distance between self after the event and other drivers who have not witnessed a railway suicide, and participants past IES-R scores.

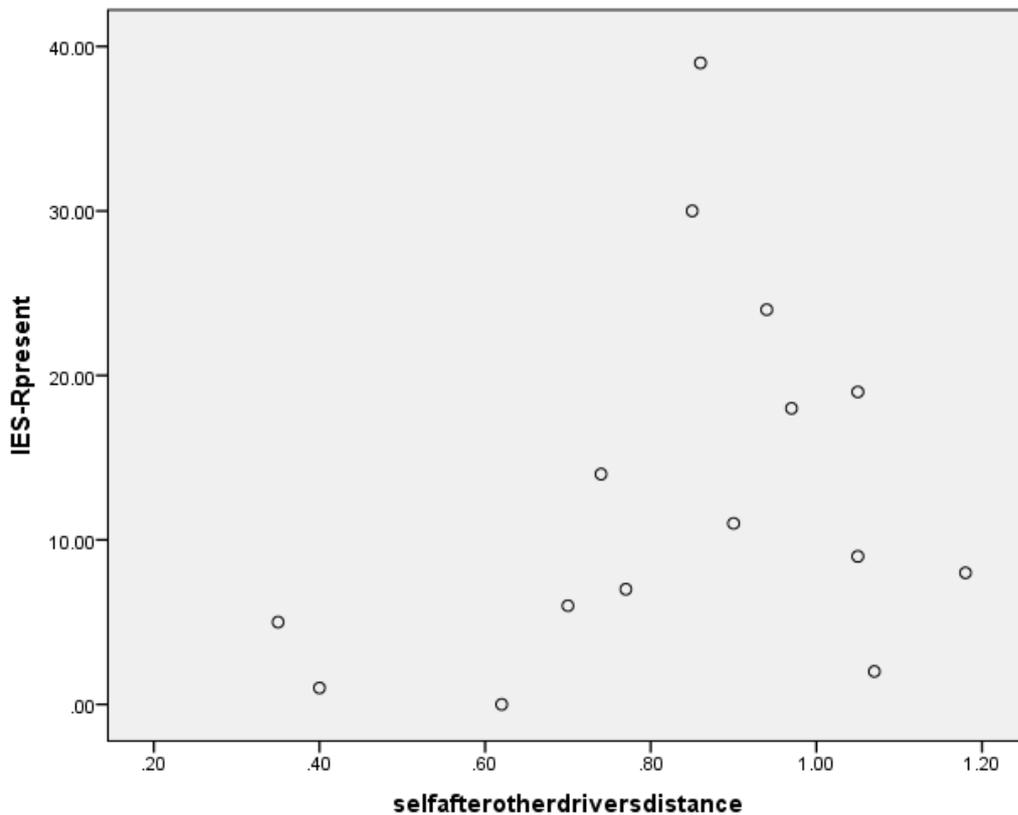


Figure 22. A scatterplot showing no relationship between the standardised Euclidean distance between self after the event and other drivers who have not witnessed a railway suicide, and participants' present IES-R scores.

Although the above correlation did not reach statistical significance, it is of clinical significance to note that the scatterplots above appears to demonstrate a positive relationship between dissimilarity in the construing of the self after the event and the drivers who have not witnessed a railway suicide, and present scores on the IES-R. As previously mentioned a correlation coefficient of .372 suggests that there was a moderate effect, but that the power achieved by the small sample size was not strong enough to detect it. This therefore supports the interpretation of the scatterplot and as a result, the hypothesis.

Hypothesis: Dissimilarity in the construing of the current self (personal or professional), and the construing of the person who committed suicide, will be positively correlated with scores on the IES-R.

There was no significant correlation between dissimilarity in the construing of the self after the event (current personal self) and the person who committed suicide and either past ( $r_s = -.258$ ,

n =15, p.354, 2-tailed) or present scores ( $r_s = -.150$ , n = 15, p.593, 2-tailed). These results are represented graphically in Figures 23 and 24.

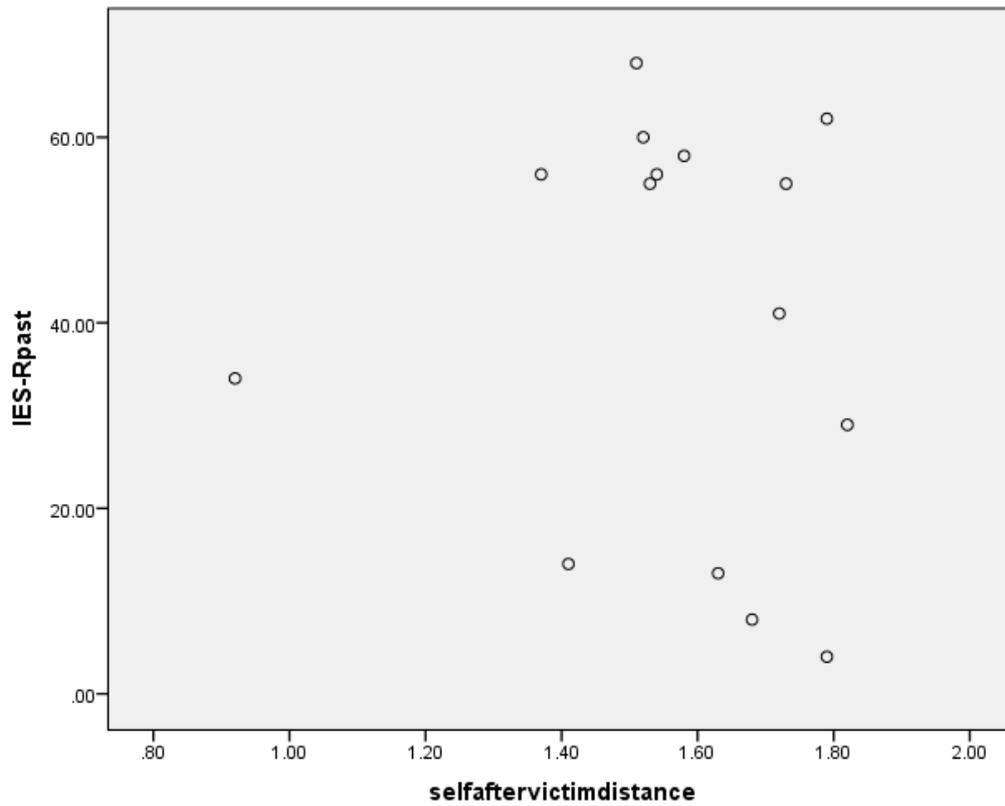


Figure 23. A scatterplot showing no relationship between the standardised Euclidean distance of self after the event, and the person who committed suicide, and participants past IES-R scores.

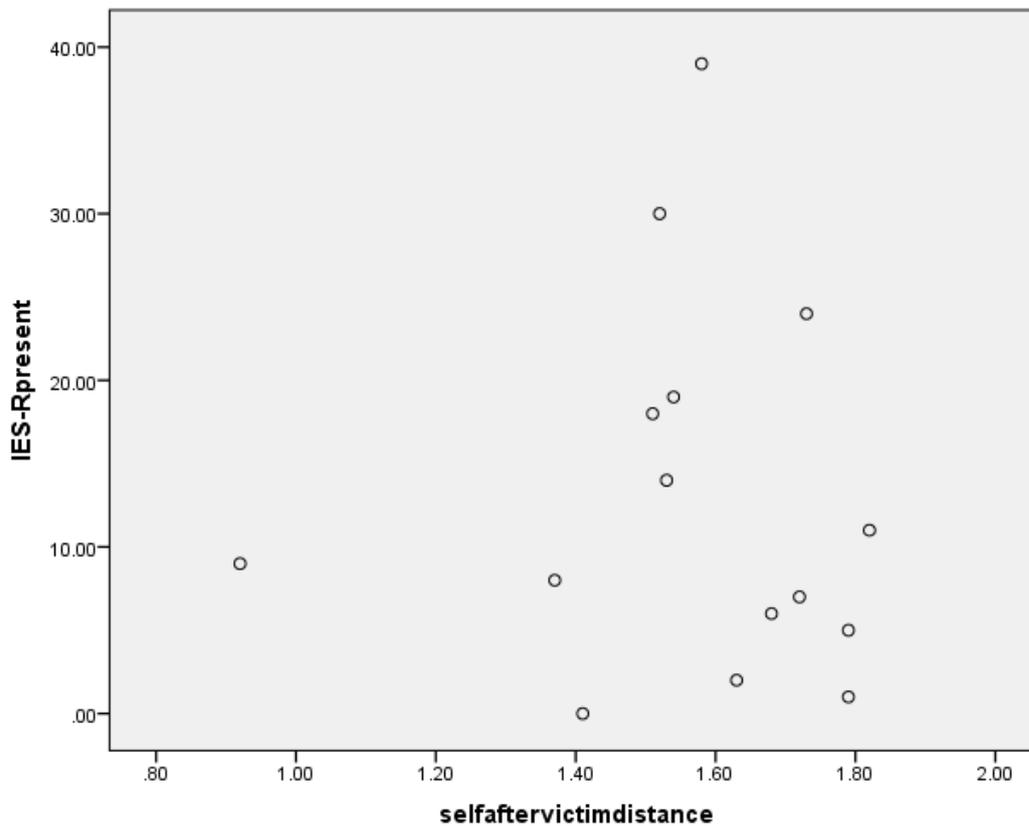


Figure 24. A scatterplot showing no relationship between the standardised Euclidean distance of self after the event, and the person who committed suicide, and participants present IES-R scores.

### 3.6.4 Content Analysis of Constructs

The frequency and percentages of the elicited constructs as categorised using the Classification System for Personal Constructs (CSPC) (Feixas, Geldschlager and Neimeyer, 2002) are shown in Table 5. Of the 45 categories, 26 best described the content of the participants' constructs. The most frequent category was 'Balanced-Unbalanced', comprising constructs such as calm and nervous, followed by 'Altruist-Egoist', comprising constructs such as selfish and is concerned about others. The area most represented by participants' constructs was 'Emotional', which is related to the degree of emotionality of the person described, followed by 'Personal' which is related to characteristics pertaining to the area of personality (Feixas et al. 2002).

Table 5.0 – Table showing CSPC category frequencies for participants' grid constructs.

Area	Category	Frequency	Percentage
Personal	Strong-Weak	10	6.2
Moral	Respectful-Judgemental	1	0.6
Emotional	Visceral-Rational	9	5.6
Personal	Mature-Immature	1	0.6
Moral	Altruist-Egoist	18	11.3
Personal	Responsible-Irresponsible	1	0.6
Emotional	Balanced-Unbalanced	36	22.5
Moral	Sincere-Insincere	6	3.7
Personal	Active-Passive	8	5
Personal	Thoughtful-Shallow	15	9.3
Relational	Extraverted-Introverted	12	7.5
Relational	Sympathetic-Unsympathetic	7	4.3
Emotional	Specific Emotions	7	4.3
Personal	Self-Acceptance-Self-Criticism	4	2.5
Emotional	Optimist-Pessimist	2	1.2
Personal	Hardworking-Lazy	2	1.2
Intellectual/Operational	Cultured-Uncultured	4	2.5
Moral	Good-Bad	3	1.9
Intellectual/Operational	Focused-Unfocused	2	1.2
Relational	Trusting-Suspicious	1	0.6
Personal	Organised-Disorganised	1	0.6

Emotional	Warm-Cold	3	1.9
Relational	Pleasant-Unpleasant	3	1.9
Personal	Flexible-Rigid	2	1.2
Intellectual/Operational	Intelligent-Dull	2	1.2
Moral	Faithful-Unfaithful	1	0.6
	TOTAL	161	100

Table 6 is a content analysis of the constructs used by participants' to describe the element 'person who committed suicide', using the CSPC categories (Feixas et al. 2002). Of the 45 categories, 22 best described the content of the participants' constructs. Again, the most frequent category was 'Balanced-Unbalanced', followed by 'Altruist-Egoist'. The area most represented by participants' constructs was 'Emotional', followed by 'Moral', which is an assessment of the moral value of the person described (Feixas et al. 2002).

Table 6.0 – Table showing category frequencies of constructs applied to the element 'person who committed suicide'.

Area	Category	Frequency	Percentage
Personal	Hardworking-Lazy	1	0.8
Emotional	Visceral-Rational	5	4.2
Moral	Altruist-Egoist	19	16.1
Intellectual/Operational	Cultured-Uncultured	5	4.2
Emotional	Balanced-Unbalanced	37	31.5
Moral	Sincere-Insincere	5	4.2
Personal	Thoughtful-Shallow	9	7.6
Personal	Strong-Weak	8	6.9

Emotional	Specific Emotions	8	6.9
Personal	Mature-Immature	1	0.8
Personal	Flexible-Rigid	2	1.7
Emotional	Warm-Cold	2	1.7
Personal	Active-Passive	3	2.6
Intellectual/Operational	Capable-Incapable	1	0.8
Intellectual/Operational	Organised-Disorganised	1	0.8
Moral	Good-Bad	1	0.8
Relational	Extraverted-Introverted	3	2.6
Intellectual/Operational	Intelligent-Dull	1	0.8
Moral	Respectful-Judgemental	2	1.7
Moral	Just-Unjust	1	0.8
Intellectual/Operational	Focused-Unfocused	2	1.7
Relational	Pleasant-Unpleasant	1	0.8
	TOTAL	118	100

Table 7.0 – Table showing contrast poles of the supplied construct ‘traumatised’ and their relevant CSPC area and category.

Construct	Area	Category	Frequency	Percentage
‘Traumatised-Normal’	Emotional	Balanced-Unbalanced	5	33.3
‘Traumatised-Chilled’	Emotional	Balanced-Unbalanced	1	6.7

‘Traumatised-Dealing with it’	Emotional	Visceral-Rational	1	6.7
‘Traumatised-Comfortable’	Emotional	Balanced-Unbalanced	1	6.7
‘Traumatised-At peace’	Emotional	Balanced-Unbalanced	1	6.7
‘Traumatised-Sane’	Emotional	Balanced-Unbalanced	1	6.7
‘Traumatised-Settled’	Emotional	Balanced-Unbalanced	1	6.7
‘Traumatised-Philosophical’	Personal	Strong-Weak	1	6.7
‘Traumatised-Not accepting’	Personal	Strong-Weak	1	6.7
‘Traumatised-Happy’	Emotional	Specific Emotions	2	13.3
	TOTAL		15	100

Table 7 is a representation of the contrast poles used by participants in response to the supplied construct ‘traumatised’ and of the content analysis conducted on them. The most frequent category was ‘Balanced-Unbalanced’, followed by ‘Strong-Weak’. The area most represented by the participants’ constructs was ‘Emotional’, followed by ‘Moral’.

Hypothesis: The number of emotional constructs as measured by the CSPC will be negatively correlated with scores on the IES-R.

There was a significant negative correlation between the number of emotional constructs as measured by the CSPC and present scores on the IES-R ( $r_s = -.751$ ,  $n = 15$ ,  $p .001$ , 1-tailed). Thus, the more emotional constructs employed by participants, the lower their score on the IES-R. This is in line with what was predicted. These results are represented graphically in Figure 25.

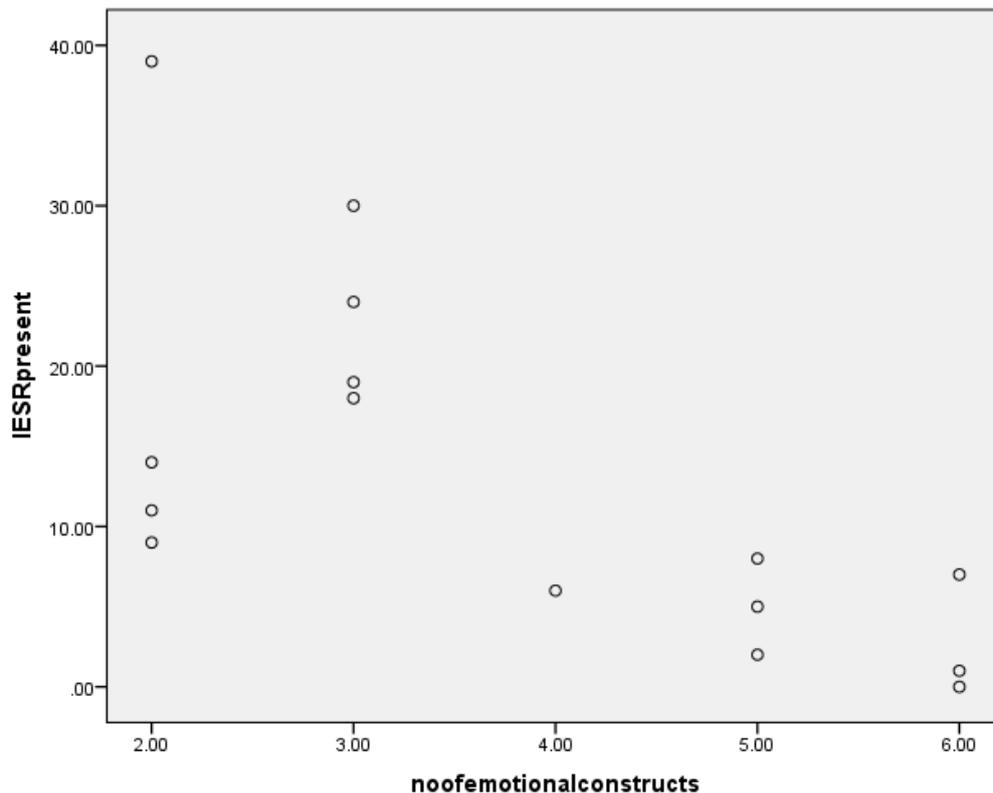


Figure 25. A scatterplot showing a significant negative relationship between the number of emotional constructs employed by participants, and their present scores on the IES-R.

The correlation between the number of emotional constructs as measured by the CSPC and participants' past scores on the IES-R was not significant ( $r_s = -.320$ ,  $n = 15$ ,  $p .122$ , 1-tailed). However, as previously mentioned a correlation coefficient of  $.320$  suggests that there was a moderate effect, but that the power achieved by the small sample size was not strong enough to detect it. This therefore supports the hypothesis.

Hypothesis: The number of moral constructs as measured by the CSPC will be positively correlated with scores on the IES-R.

There was a significant positive correlation between the number of moral constructs as measured by the CSPC and present scores on the IES-R ( $r_s = .629$ ,  $n = 15$ ,  $p .006$ , 1-tailed). Thus, the more moral constructs employed by participants, the higher their score on the IES-R. This is in line with what was predicted. These results are represented graphically in Figure 26.

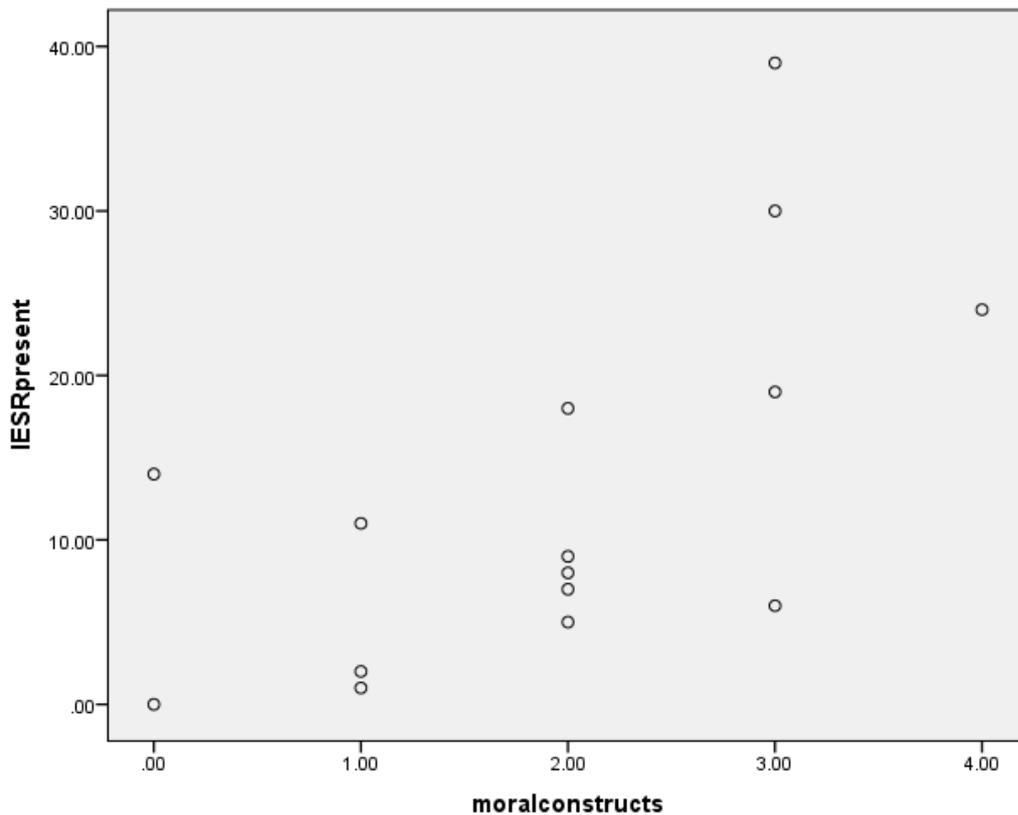


Figure 26. A scatterplot showing a significant positive relationship between the number of moral constructs employed by participants, and their present scores on the IES-R.

The correlation between the number of moral constructs as measured by the CSPC, and participants' past scores on the IES-R was not significant ( $r_s = .410$ ,  $n = 15$ ,  $p .064$ , 1-tailed). However, as previously mentioned a correlation coefficient of .410 suggests that there was a moderate effect, but that the power achieved by the small sample size was not strong enough to detect it. This therefore supports the hypothesis.

Hypothesis: The number of moral constructs applied to the element 'person who committed suicide', as measured by the CSPC will be positively correlated with scores on the IES-R.

There was a significant positive correlation between the number of moral constructs applied to the element 'person who committed suicide' as measured by the CSPC and present scores on the IES-R ( $r_s = .553$ ,  $n = 15$ ,  $p .016$ , 1-tailed). Thus, the more moral constructs employed by participants when describing the element 'person who committed suicide', the higher their score on the IES-R. This is in line with what was predicted. These results are represented graphically in Figure 27.

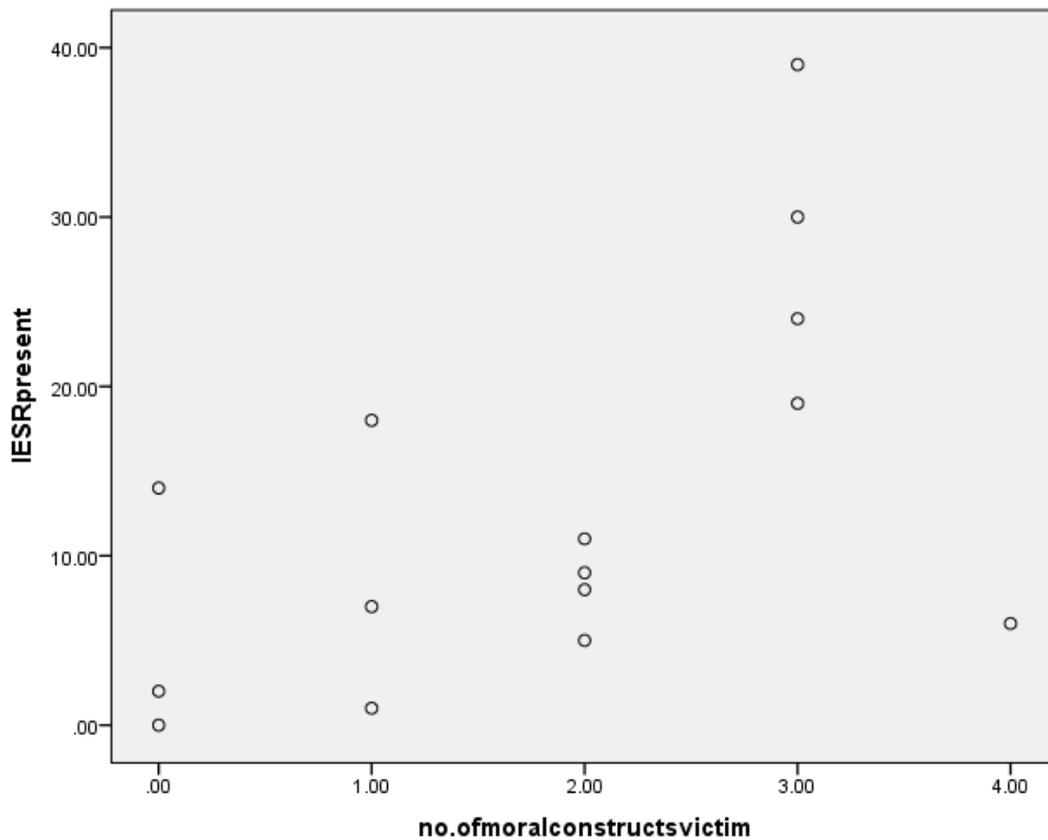


Figure 27. A scatterplot showing a significant positive relationship between the number of moral constructs used to describe the element ‘person who committed suicide’, and participants’ present scores on the IES-R.

The correlation between the number of moral constructs used to describe the element ‘person who committed suicide’ and participants’ past scores on the IES-R was not significant ( $r_s = .249$ ,  $n = 15$ ,  $p .186$ , 1-tailed).

### 3.7 Case Studies and Thematic Analyses

The following section presents case studies of two participants, both of whom described different experiences following witnessing the railway suicide. The section will begin with a presentation of each participant’s demographic information, followed by a presentation of the contextual details surrounding the suicide they witnessed. Their individual scores from the IES-R will then be described, followed by an interpretation of their repertory grid data, and a presentation of the thematic analysis carried out on the second interview with the participants.

Pseudonyms are being used throughout, and each participant's score (either from the IES-R or repertory grid measures) has been compared to the overall sample mean to aid interpretation.

### 3.7.1 An example of a participant with a higher score on the IES-R.

#### *Background Information*

Luke was a White British male aged between 30 and 39 years old. At the time of participation Luke was living with his girlfriend. Luke had been a train driver for eight years, and had witnessed one railway suicide whilst driving a train. This had occurred approximately five months prior to the research interview. Luke stated that the suicide had occurred in the day, and that no medical tests were carried out on him following the event. A colleague was present at the time of the incident. He was interviewed by the BTP in order to ascertain the nature of the incident. Luke had not yet attended Coroners' Court at the time of the research, though was expecting to be asked to attend when a date was set. Luke had three months off work following the suicide, and received professional support from a counsellor. Luke was given an official diagnosis of PTSD. Luke explained that shortly before the incident he had gone through a relationship breakdown. Luke stated that he had not found his company's systems helped him to manage after the incident, and reported feeling that he was being forced back to work. Luke had returned to work, but stated that at times he still felt low and angry and experienced nightmares about the incident.

#### *Questionnaire Scores*

Luke scored a total of 58 out of 80 on the past measure of the IES-R. Luke scored a total of 39 out of 80 on the present measure of the IES-R. Both of these scores are above the average for the sample: 40.87 and 12.87 respectively. These scores indicate that at its worst point Luke experienced a high level of distress, and was currently still experiencing a moderate amount of distress at the time of the research. Luke's highest subscale score was for intrusive symptoms, and this was the case on both the past and present measure, scoring 3.8 out of 4 and 3 out of 4 respectively. Both of these scores are again above the average for the sample: 2.5 and 0.9 respectively. This suggests that Luke experienced symptoms of distress such as intrusive thoughts, feelings, images and memories of the event, trouble sleeping, flashbacks and dreams related to the event.

### *Elicited constructs*

1. Resilient - vulnerable
2. Gets cross easily - mellow
3. Loving - introvert
4. Self-absorbed - giving to others
5. Thoughtful – thoughtless
6. Professional – unprofessional
7. Blissfully ignorant – experienced
8. Empathic – selfish
9. Prepared – unprepared
10. Overcome what happened – end of tether
11. Traumatized – normal

### *Idiogrid representation of Luke's repertory grid*

Figure 28 is a graphical representation of the interaction between the elements and constructs in Luke's repertory grid using the Idiogrid computer programme. It was created by undertaking a Principal Components Analysis of Luke's grid (PCA, Slater, 1977). The PCA looks at patterns of variance within the grid. The first principal component (PC1) is represented by the horizontal axis, and accounts for the largest amount of variability in the grid. The vertical axis represents the second principal component (PC2), which accounts for most of the remaining variability in the grid. The elements and constructs are plotted along these axes according to their loadings on these components – the extent to which the constructs and elements are represented by the component.

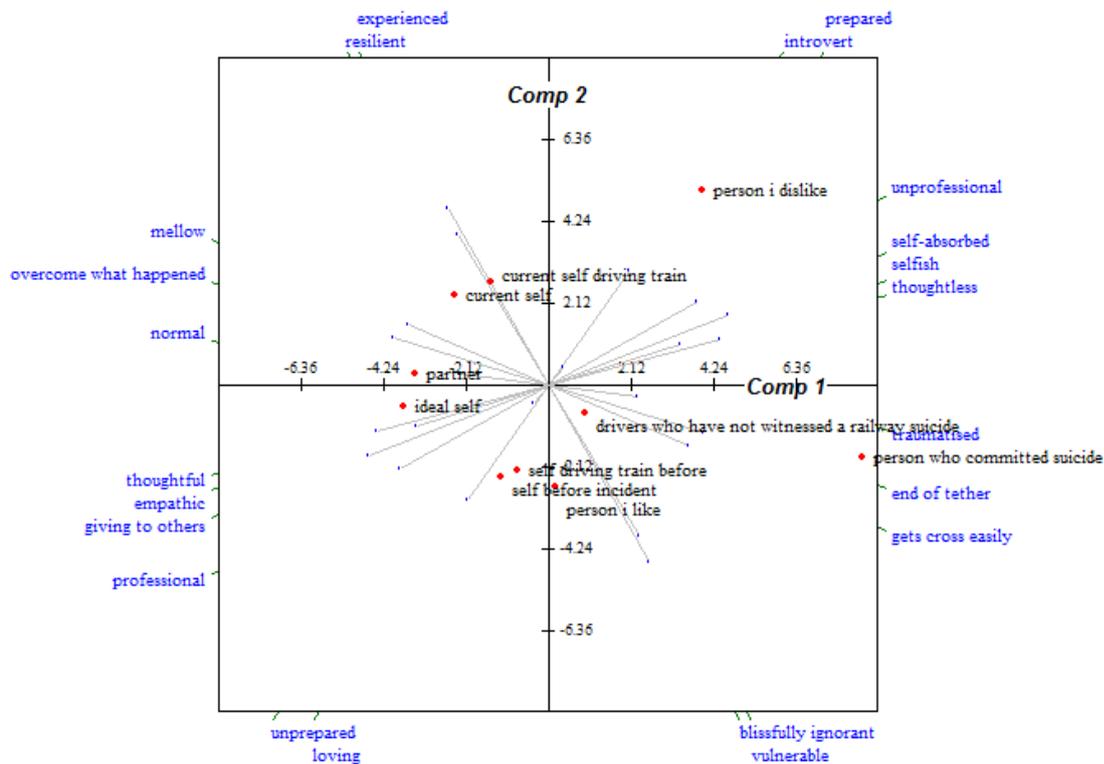


Figure 28. Idiogram representation of Luke's repertory grid.

### *Distances*

Figure 28 can be used to visually examine the distances between elements and constructs within Luke's grid. The elements and constructs in opposing quadrants of a grid are thought to be the most dissimilar, and those elements furthest removed from the origin of the grid are thought to be the most extremely perceived (Winter, 1992).

The grid shows that Luke perceives the 'person who committed suicide' in a more extreme way than other elements in the grid. They are also situated close to the construct poles 'traumatised', 'end of tether' and 'gets cross easily', suggesting that they are highly defined by these constructs. The placement of the 'person who committed suicide' in the opposite quadrant to Luke's 'current self', 'current self when driving train' and 'partner' suggests that Luke views these elements as very different. 'Drivers who have not witnessed a railway suicide' are also situated within this quadrant, suggesting that Luke perceives colleagues who have not been through the experience, as again very dissimilar to him. The grid shows that Luke's current self has moved further away from his ideal self, compared to his self before the incident. His ideal self is placed close to the construct poles 'thoughtful', 'empathic' and 'giving to others' and it

appears that the experience has moved Luke closer towards the non-preferred poles of these constructs, 'self-absorbed', 'selfish' and 'thoughtless'. Additionally, although Luke perceives his current self as more 'prepared', 'resilient' and 'experienced' than his self before the incident, a movement towards the preferred poles of these constructs perhaps, he has also moved away from 'loving' and from being 'blissfully ignorant'. This suggests that there are some ways in which Luke would like to be where he was before the incident, but perhaps other ways in which he has experienced a preferred change. Overall the grid suggests that Luke experienced some significant changes in the construing of himself and others following the experience. This can be supported by looking at the element Euclidean distances figures provided by the Idiogrid programme. A distance of 0 indicates that the two elements are construed in identical fashion. A distance of less than 0.5 indicates that two elements are very similar, and a distance of more than 1.5 indicates that the elements are very different, distances rarely exceeding 2 (Winter, 1992). The overall sample mean for the distance between self after the event and ideal self was 0.5, and Luke's distance score was therefore above average at 0.6. The overall sample mean for the distance between self before the event and self after the event was 0.6, and Luke's distance was again above average at 0.8. The overall sample mean for the distance between the current self and drivers who have not witnessed a railway suicide was 0.8, and Luke's distance was also 0.8. The overall sample mean for the distance between the current self and the person who committed suicide was 1.6, and Luke's distance was slightly above average at 1.8.

#### *Tightness of the system*

The Idiogrid output highlighted that Luke construed relatively loosely compared to the whole sample. The sample mean percentage of variance accounted for by the first principal component was 69.03%, whereas in Luke's grid the percentage was 50.22%. This is against the predicted direction of hypothesis 6 that stated that tighter construing would be linked to a higher IES-R score. However, as mentioned in the Introduction, too loose construing can leave an individual unable to make a concrete prediction about the world, which can also then lead to anxiety. This would therefore make sense of Luke's higher impact of event score and higher psychological distress.

#### *Extremity of ratings*

The average number of extreme ratings in a grid (ratings of either 1 or 6 applied to constructs) for the whole sample was 41. Luke had 31 extreme ratings, and on this measure was therefore below average. The number of extreme ratings applied to the element 'person who committed suicide' was also examined. The mean number for the whole sample was 8 and Luke gave that element 9 extreme ratings, and was therefore slightly above the average.

These findings provide support to hypothesis 12 that predicted that higher numbers of extreme ratings applied to the element 'person who committed suicide' would be positively correlated with IES-R scores, but not to hypothesis 11 that predicted that higher numbers of extreme ratings in the whole grid would be positively correlated with IES-R scores.

### *Superordinacy*

The Idiogrid output suggests that Luke construes the element 'person who committed suicide' as more important or superordinate than any of the other elements in the grid. This is evidenced by it having the highest salience score (32.54%). This was comparable to the average for the whole sample at 33.41%. A high saliency for this particular element is perhaps to be expected as participants were focused on the event when eliciting constructs, even for those triads not containing the element. The least salient element was 'drivers who have not witnessed a railway suicide' (3.38%).

The most superordinate construct for Luke was 'blissfully ignorant-experienced', with a percentage sum of squares of 13.89%. This construct is therefore more important to Luke than his other constructs. This perhaps reflects the possible dilemma identified when examining the distances between elements and constructs using the PCA plot, in that Luke construed himself before the incident as blissfully ignorant, and his self after as experienced. The fact that this is an important construct is no surprise, when both poles of the construct could be considered to be preferred. You can either be blissfully ignorant and closer to your ideal self, but less experienced, or further from your ideal self but more experienced. As Luke continues to drive trains it seems it is important for him to be experienced, but he actually would prefer to be 'blissfully ignorant'. The least superordinate construct for Luke was 'traumatised-normal', with a percentage sum of squares of 6.03%. This construct is therefore less important to Luke than any of the others in his system. The mean for the overall sample was 8.04% indicating that Luke's traumatised construct occupied a below average position. Since Luke obtained high

scores on the IES-R, this is in the opposite direction to what was predicted in relation to hypothesis 10. However it might make sense of Luke's higher levels of distress in that less superordinate constructs could be considered to be less processed and as highlighted in the introduction, Sewell and Cromwell's (1990) PCP model of trauma suggests that when an event is not processed and successfully integrated into a person's construct system this is when difficulties such as PTSD can arise. This theory was supported by the group statistical analyses which found a negative correlation between the relative superordinancy of the traumatised construct and participants' past and present IES-R scores.

### *Conflict*

Conflict was measured using the GRIDSTAT programme. Luke had 11.0% conflict associated with the element 'self after the event', which is slightly above the group mean of 10.27%. The highest percentage of conflict in Luke's grid was associated with the element 'person who committed suicide' at 18.1%, above the group average of 14.1%. Luke construed the 'person who committed suicide' as 'traumatised' and at the 'end of their tether' but also as someone who 'gets cross easily', is 'selfish', 'thoughtless' and 'self-absorbed', perhaps providing an indication of why this element was so conflictual. These results support the hypothesis that higher levels of conflict regarding the elements 'current self' and 'person who committed suicide' will be associated with greater psychological distress.

### *Elaboration*

Elaboration was measured using the HICLAS programme. The level of elaboration of the 'self after the incident' and the 'self when driving a train after the incident' was 4, with a higher number indicating the elements are more elaborated. Compared to the group means of 3.1, Luke is therefore above average. This supports the hypothesis that greater elaboration leads to higher psychological distress. As mentioned in the Introduction it is suggested by Sermpezis and Winter (2009) that distress following traumatic events is caused by the event being over-elaborated and therefore construing is dominated by the event. The level of elaboration of the 'person who committed suicide' was 3, compared to the group mean of 2.1, Luke is therefore above average, again providing support to this hypothesis. The level of elaboration of the construct 'traumatised-normal' is however below the group mean of 1.4 at 0.

### 3.6.1.11 Content analysis

An analysis of the content of Luke's constructs revealed that most of his constructs fall into the moral area of the CSPC. This supports the hypothesis that the number of moral constructs will be positively correlated with IES-R scores. The moral area concerns a judgment made by the individual on the moral value of the element being described and therefore this suggests that much of Luke's construing is focused on judgements around fairness and right and wrong. Examples of constructs of Luke's that fall into this category are 'self-absorbed-giving to others', 'thoughtful-thoughtless', 'empathic-selfish' and 'professional-unprofessional'.

#### *Thematic Analysis*

A number of initial themes were developed from Luke's interview as illustrated in the thematic development maps below (Figure 29).

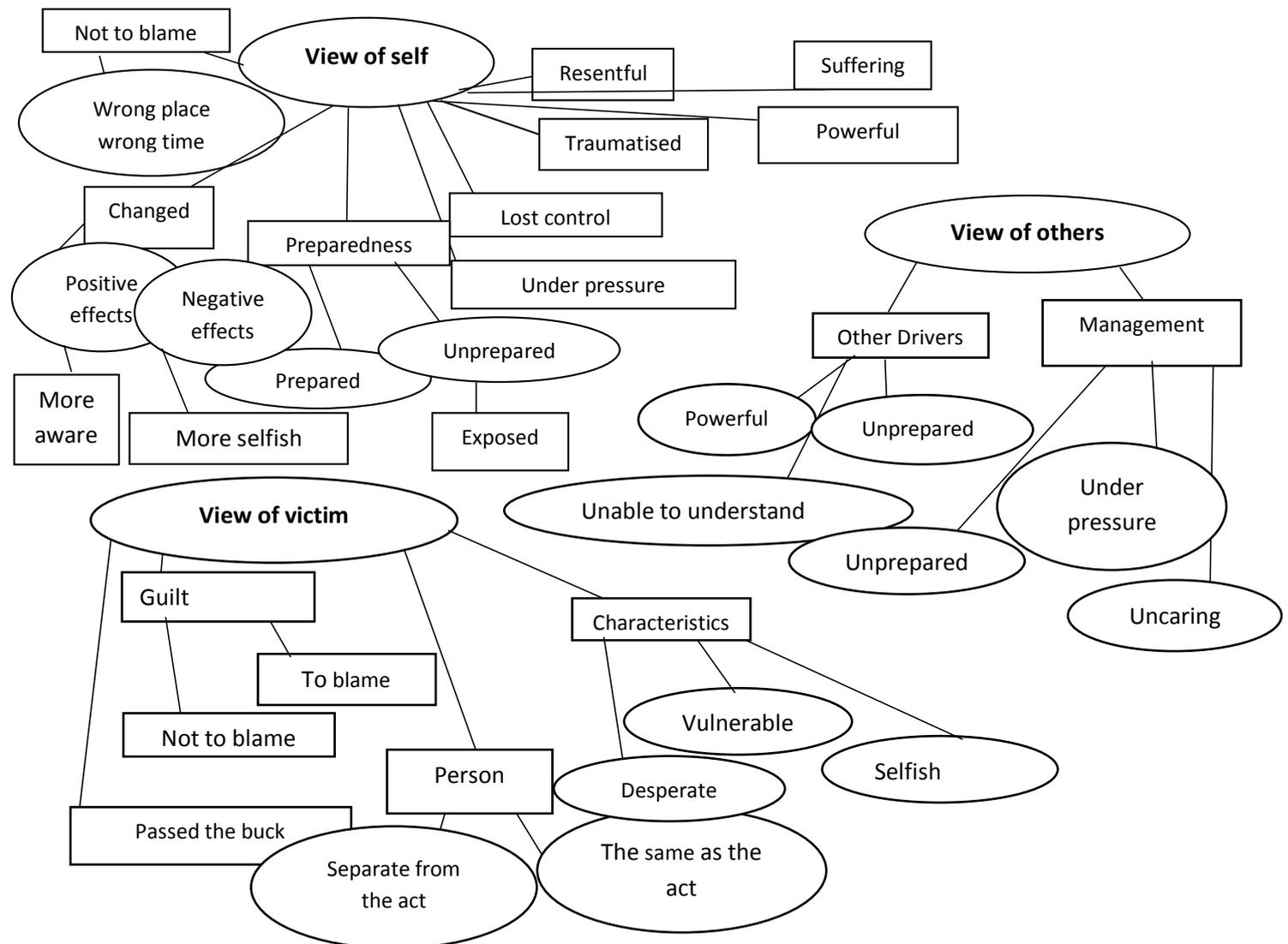


Figure 29. Initial thematic map, showing three main themes.

The superordinate themes were related to the main research questions and remained constant as ‘view of self’, ‘view of others’ and ‘view of person who committed suicide (victim)’. These superordinate themes were then divided into further themes and final themes reached through a process of combining, refining, separating and discarding (Braun & Clark, 2006).

### View of self

The main themes identified in terms of Luke’s view of the self are presented in Figure 30 below.

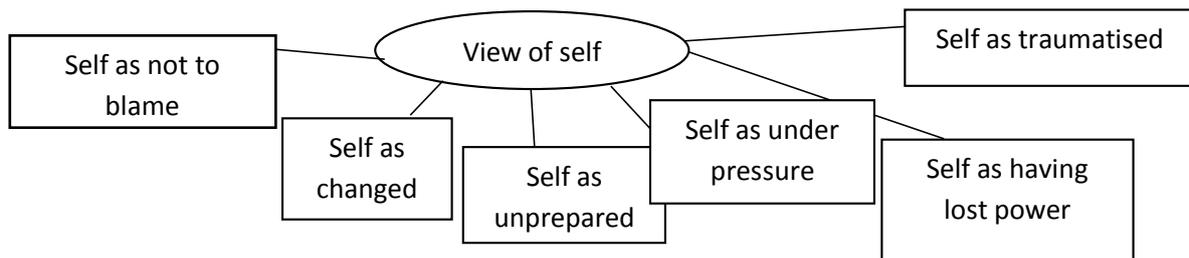


Figure 30. Developed thematic map for view of self

At no point during the interview did Luke attribute any blame to himself, referring to the incident as ‘unfortunate’ and that he was in the ‘wrong place at the wrong time’, emphasising that the person who committed suicide ‘killed himself’ as shown in the following quote:

*“I didn’t kill him, he killed himself”*

Luke appeared to identify with the PCA plot that his current self (self after the incident) was different to his self before the incident, both personally and professionally. Again, in accordance with the repertory grid analysis, Luke spoke of both positive and effects of the incident. In terms of his professional life Luke spoke of being more ‘hypervigilant’ and ‘more alert’ as negative changes, and being ‘more aware’ as a positive change. In terms of his personal life Luke identified with the PCA plot’s suggestion that since the incident he may have become more selfish, and spoke about making a ‘conscious decision’ to do so because of a need to protect himself, as illustrated by the following quote:

*“It’s not something that’s happened to me without me realising it, it’s a conscious decision of, I don’t want other people’s shit, I’ve got enough of my own”.*

There was a sense during the interview that Luke was experiencing more feelings of anger about the incident than he had been when we had first met, as evidenced by him stating that he viewed himself as ‘resentful’ (a construct missing from the PCA plot) towards ‘the job itself’, towards ‘colleagues’, towards ‘management’, the ‘industry as a whole’ and towards the ‘person’ (who committed suicide).

A significant theme in the interview was Luke’s belief that his ‘preconceived idea’ of how he would be affected by such an incident had left him ‘unprepared’ for how he was affected by it. Luke felt that this was accurately represented in the PCA plot by the position of both his personal and professional selves close to the construct poles ‘vulnerable’, ‘unprepared’ and ‘blissfully ignorant’. Luke said that he (like most drivers) was aware that it was an experience he was likely to encounter, and had therefore ‘decided how he was going to deal with it’ beforehand. The effects of this are illustrated in the following quote

*“How I thought I would feel and how I thought it would affect me sort of left me very much exposed... I didn’t have any armour... My armour was all for what I thought was going to come”*

Luke spoke about how he had become more ‘cynical’ as a result, that this unanticipated reaction to the event had left him feeling that you cannot expect things in life to happen as you predicted, as illustrated by the following quote:

*“I think to be naïve and walk through life thinking everything’s going to be hunky-dory you’re setting yourself up for a fall in my mind, and the world don’t work like that”*

As discussed previously the percentage of variance accounted for by the first principal component in Luke’s repertory grid was below average when compared to the sample, suggesting relatively loose construing. This theme perhaps provides an explanation for this finding, in that it could be considered that Luke’s predictions about his response to the incident were invalidated, resulting in the loosening of constructs, a decreased ability to predict the world, and therefore increased anxiety.

A further theme to emerge from the interview which was indicated by his responses in the background questionnaire but not so apparent during the initial repertory grid interview, was the ‘pressure’ Luke viewed himself as being under after the incident to return to work as illustrated by the following quote:

*“and I think that they (management) get pressure from above thinking, we’re giving these guys a lot of money and they’re not doing the job. We’ve got to get them back on there. But unfortunately that pressure is put on them and they put it a little bit even harder onto you”*

An additional theme that arose out of the interview with Luke was a sense of how powerful and in control he had felt as a train driver before the incident, and the sense he had of having lost this control and power after the incident. Luke talked about the position train drivers have in the rail industry as being quite envied, and described himself and other drivers as ‘king(s) of the iron road’, on a ‘pedestal’ and as their ‘own boss’ as very much in control of a train that ‘won’t go’ ‘won’t stop’ ‘won’t do nothing without us’. Luke talked about how he felt this made them extra vulnerable, as illustrated by the following quote:

*Q: “So what happens when somebody jumps in front of it then to that?”*

*R: “It’s a bit like a bubble, isn’t it, and it just pops and you’re sort of left in this sort of shell of me in my big train and now all of a sudden it’s me and now I’m suffering. Do you see what I’m saying? And everything you thought was going okay in your life and how you’re doing really well in your life and how you’re top of the food chain in your career all counts for shit and you become resentful because it’s happened to you and you feel this way because of the job, that’s how you feel about it and how you feel all of a sudden the thing that pays the rent and puts food on the table is now the thing that’s made you feel shit”*

Luke agreed somewhat with the position of his current self as having ‘overcome’ what had happened, ‘normal’ and ‘mellow’ but felt that he only occupied that position sometimes. During the interview he talked about some of the more specific effects of the trauma such as ‘flashbacks’, having his ‘head in the clouds’ and ‘serious concentration issues’.

## View of others

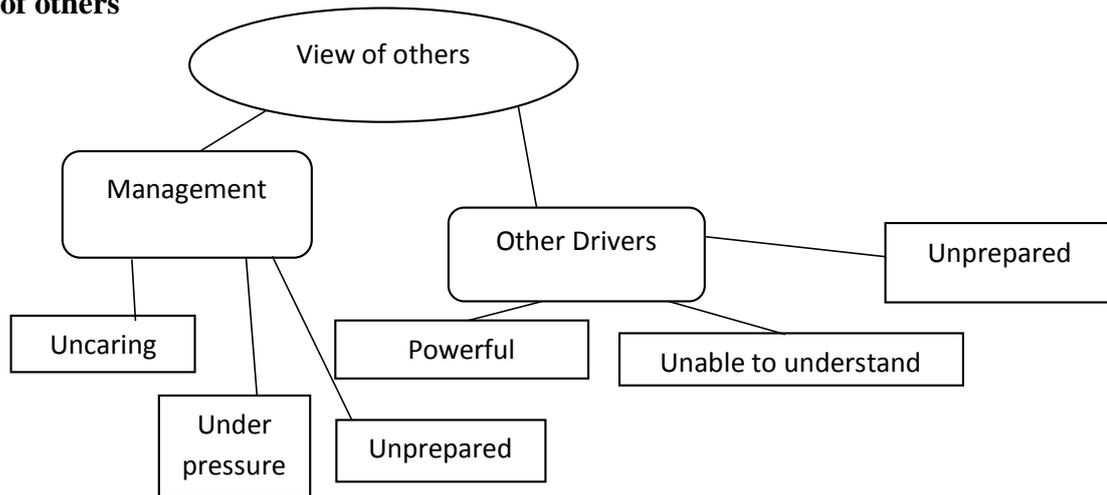


Figure 31. Developed thematic map for view of others.

Figure 31 above shows the main themes identified in terms of Luke's view of others.

Luke spoke of management as being 'under pressure' following such incidents, therefore showing some understanding towards their position, but he also spoke of some negative feelings. These themes were additional to ideas created during the repertory grid interview, possibly due to the lack of an element to represent management. Some of Luke's feelings toward his management are illustrated by the following quote:

*"But I feel that the way it was handled by my bunch was shocking basically, and I think I'll hold that resentment towards those for the rest of my life to be honest with you. I feel that I was very badly let down".*

He spoke of management needing to be more 'compassionate' and mindful of the fact that 'this happened whilst doing a job for them'. He spoke of feeling that the managers were as unprepared as he was for dealing with such an incident, as illustrated by the following quote:

*"They should know how to deal with it and it just seems from my personal experience that they don't, they don't have the slightest inkling how to deal with us"*

Luke's view of others drivers was as unprepared, unable to understand, and prior to the incident being in a powerful position, similar to how he viewed himself before the incident. He also agreed that he felt more distant from drivers who have not witnessed a railway suicide since

his own incident. Some of Luke's feelings towards other drivers are illustrated by the following quote:

*"I honestly don't feel they can really grasp what it's like until it happens, and as I know, people could tell you that it happens and as a train driver you see it happen to other people and it still doesn't prepare you for it".*

### **View of the person who committed suicide (the 'victim')**

Two themes were identified as relating to the superordinate theme 'view of victim'. As shown in Figure 32.

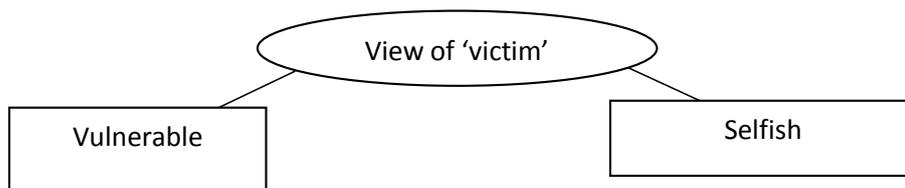


Figure 32. Developed thematic map for view of victim

Throughout the interview Luke seemed to struggle with his view of the 'victim', and there were some inconsistencies throughout his account of his feelings towards them. This could be seen to reflect his relatively loose construing but could also be linked to the fact that the highest amount of conflict in Luke's repertory grid was associated with the 'victim'. Luke agreed that he had both negative and positive feelings towards the 'victim', as illustrated by the quotes below:

*"I do in a way feel very sorry for them and if time could turn back I wish that they could have got the help they needed and not felt they had to do that" ...*

*"I feel resentful and I feel no matter how bad your life was maybe you should have just given it a bit more thought of, I want to do myself in, how can I do it where no-one else is involved rather than not caring who else is involved".*

When viewing the victim as selfish Luke would talk about feeling like the victim had 'passed the buck' and left him with the consequences; when viewing the victim as more vulnerable he

agreed with the PCA plot that they were at the ‘end of their tether’, ‘annoyed with life’ and ‘traumatised’.

Luke also seemed to be making an effort to separate the person from the act, as illustrated by the following quote:

*“I would say that the two are differentiated in that one is the person and the other is the act. So I would say that a person was traumatised, at the end of their tether and obviously very annoyed with life, and the act of throwing themselves in front of my train was very much self-absorbed, selfish and thoughtless”*

This seemed to enable him to see the act as selfish but the person as vulnerable. However, he spoke about it taking ‘an effort’ to separate the two as ‘impulsively the two are the same’ and ‘it took one to do the other’.

### 3.7.2 An example of a participant with a lower score on the IES-R.

#### *Background*

Michael was a married White British male aged between 40 and 49 years old. Michael had been a train driver for six years, and had witnessed one railway suicide whilst driving a train. This had occurred approximately two and half years prior to the research interview. Michael stated that the suicide had occurred in the day, and that he was on his own for approximately five minutes following the incident. Michael reported that no medical tests were carried out on him following the event. He was interviewed by the BTP in order to ascertain the nature of the incident. Michael took two months off work following the suicide. Michael did not receive any professional support following the incident, nor was he given any official diagnoses related to the incident e.g. PTSD. Michael attended Coroners’ Court after the incident and reported that it was a difficult experience. Michael stated that he did not experience any other stressful life events around the time of the incident. Michael stated that he found his company’s support systems helpful in helping him to manage after the incident. He stated that he appreciated being taken home after the incident by his manager, receiving regular contact from his employers, and being repeatedly offered counselling. Michael felt that keeping busy with family and friends had been what had got him through the initial distress he experienced following the

incident. Although he still does occasionally drive trains, Michael now worked as a train driver manager.

### *Questionnaire Scores*

Michael scored a total of 29 out of 80 on the past measure of the IES-R. Michael scored a total of 11 out of 80 on the present measure of the IES-R. Both of these scores are below the average for the sample: 40.87 and 12.87 respectively. These scores indicate that at its worst point Michael experienced a moderate level of distress, and at the time of the research was experiencing a low amount of distress in relation the incident. Michael's highest subscale score was for Intrusive symptoms, and this was the case on both the past and present measure, scoring 2.1 out of 4 (slightly below the sample average of 2.5), and 1.1 out of 4 (slightly above the sample average of 0.9) respectively.

#### 3.6.2.3 Elicited constructs

1. Self-centred – able to open up
2. Happy – not as happy
3. Self-confident - shy
4. Childish - reserved
5. Dependable - untrustworthy
6. Cautious - reckless
7. Can't comprehend what it's like - aware
8. Confused – have clarity
9. Impulsive - thoughtful
10. Desperate - content
11. Traumatized - philosophical

#### *Idiogram representation of Michael's repertory grid*

Figure 33 is a graphical representation of the interaction between the elements and constructs in Michael's repertory grid using the Idiogram computer programme.

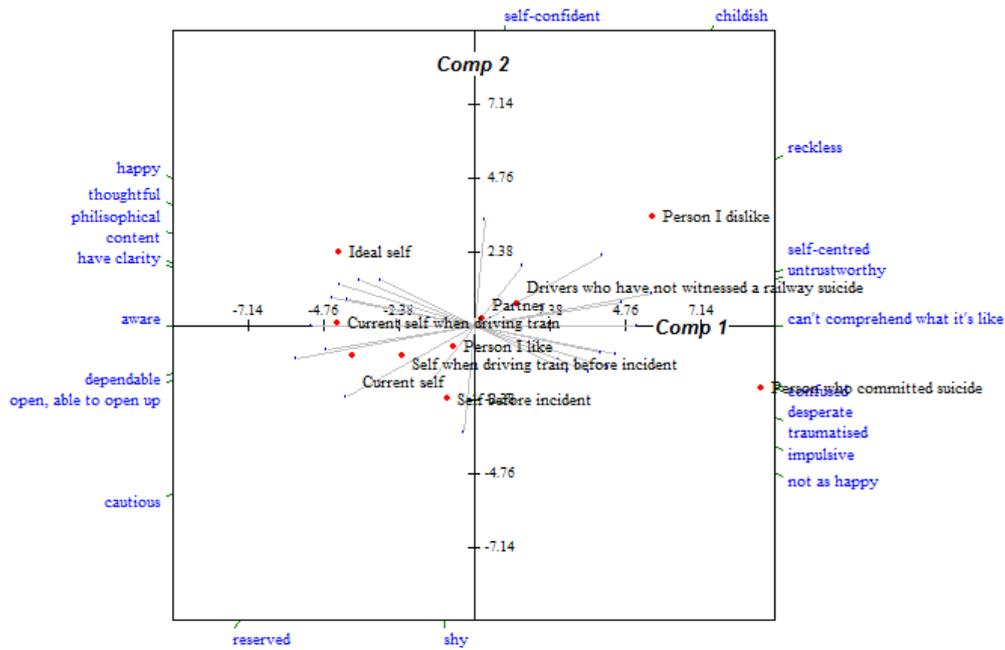


Figure 33. Idiogram representation of Michael's repertory grid.

### 3.6.2.5 Distances

Figure 33 can be used to visually examine the distances between elements and constructs within Michael's grid.

The grid shows that Michael perceives the 'person who committed suicide' in a more extreme way than other elements in the grid, as they are the furthest out on the graph. They are also situated close to the construct poles 'traumatised', 'desperate', 'confused', 'impulsive' and 'not as happy' suggesting they are highly defined by these construct poles. The placement of the 'person who committed suicide' in the opposite quadrant to Michael's 'current self when driving train' and 'ideal self' suggests that Michael views these elements as the most different, though on the whole the placement of all the elements away from 'the person who committed suicide' suggests that they are viewed as very different. 'Drivers who have not witnessed a railway suicide', 'person I dislike' and 'partner' are situated within the opposite quadrant to the elements 'current self', 'self when driving train before incident', 'self before incident' and 'person I like'. This suggests that Michael perceives people who have not been through the experience as very dissimilar to him. They are placed near the construct poles 'reckless', 'self-centred', 'untrustworthy' and 'can't comprehend what it's like'. The grid shows some

movement post incident towards the construct poles linked with Michael's 'ideal self', in that his 'current self' and 'current self when driving train' have moved away from the construct poles 'shy', 'reserved' and 'cautious' and towards the construct poles 'able to open up', 'dependable', 'aware', 'happy', 'thoughtful', 'philosophical', 'content' and 'have clarity'. The graph suggests that on the whole Michael does not perceive either his personal or professional self to have changed significantly since the incident, demonstrated by the elements related to these aspects of self still being situated relatively close to one another. This can be supported by looking at the element Euclidean distances figures provided by the Idiogrid programme. The distance between Michael's self after the event and his ideal self was above the sample average of 0.5, at 0.61. However, this was a smaller distance than that between self before the event and ideal self, which was 0.85, supporting the idea that he experienced movement towards his ideal self. Michael's distance between self before the event and self after the event was the same as the sample mean, at 0.6. The distance between Michael's current self when driving a train and self when driving a train before the incident was 0.5, slightly below the sample mean of 0.6. The overall sample mean for the distance between Michael's current self and drivers who have not witnessed a railway suicide was 0.9, slightly above the sample mean of 0.8. Michael's distance was slightly above average at 0.9. The distance between Michael's current self when driving a train and drivers who have not witnessed a railway suicide, was the same as the sample mean at 0.8. The distance between Michael's current self and the person who committed suicide was 1.8, slightly above the sample mean of 1.6.

#### 3.6.2.6 Tightness of the system

The Idiogrid output highlighted that Michael construed relatively tightly when compared to the whole sample. The sample mean percentage of variance accounted for by the first principal component was 69.03%, whereas in Michael's grid the percentage was 72.87%. This is against the predicted direction of hypothesis 8 that stated that tighter construing would be linked to a higher IES-R score. However, as mentioned in the introduction, too loose construing can leave an individual unable to make concrete predictions about the world, which can also then lead to anxiety. This would therefore make sense of Michael's lower impact of event score and lower psychological distress.

#### 3.6.2.7 Extremity of ratings

The average number of extreme ratings in a grid (ratings of either 1 or 6 applied to constructs) for the whole sample was 41. Michael had 34 extreme ratings, and on this measure was therefore below average. The number of extreme ratings applied to the element 'person who committed suicide' was also examined. The mean number for the whole sample was 8 and Michael gave that element 8 extreme ratings, therefore meeting the average.

These findings provide support to hypothesis 11 that predicted higher numbers of extreme ratings in the whole grid would be positively correlated with IES-R scores, but not to hypothesis 12 that predicted higher numbers of extreme ratings applied to the element 'person who committed suicide' would be positively correlated with IES-R scores.

### *Superordinacy*

The Idiogrid output suggests that Michael construed the element 'person who committed suicide' as more important than any of the other elements in the grid. This is evidenced by 'person who committed suicide' having the highest salience score (36.92%). This was comparable to the average for the whole sample at 33.41%. A high saliency for this particular element is perhaps to be expected as participants were focused on the event when eliciting constructs, even for those triads not containing the element. This element is therefore likely to occupy a higher position within an individual's construct system. The least salient element was 'partner' (1.11%).

The most superordinate construct for Michael was 'self-centred – able to open up', with a percentage sum of squares of 14.30%. This construct is therefore more important to Michael than his other constructs and occupies a more superordinate position in his construct system. This perhaps reflects the fact that the PCA plot indicated that Michael felt that post incident he had been more 'able to open up' and that this was a movement towards how he construed his ideal self to be. The least superordinate construct for Michael was 'childish-reserved', with a percentage sum of squares of 5.07%. This construct is therefore less important to Michael than any of the others in his system. The mean for the overall sample for the traumatised construct was 8.04%, while Michael's traumatised-philosophical construct occupied an above average position at 9.06%. This is in the opposite direction to what was predicted in relation to hypothesis 9. However it might make sense of Michael's lower levels of distress in that more superordinate constructs could be considered to be more processed and as highlighted in the

introduction, Sewell and Cromwell's (1990) PCP model of trauma suggests that when an event is not processed and successfully integrated into a person's construct system difficulties such as PTSD can arise. This theory was supported by the group statistical analyses which found a negative correlation between the relative superordinancy of the traumatised construct and participants' past and present IES-R scores.

### *Conflict*

Conflict was measured using the GRIDSTAT programme. Michael had 13.7% conflict associated with the element 'self after event', which is above the group mean of 10.27%. The highest percentage of conflict in Michael's grid was associated with the element 'person who committed suicide' at 15.6%, slightly above the group average of 14.1%. This is against the hypothesis that higher levels of conflict concerning the 'person who committed suicide' will be associated with greater psychological distress.

### *Elaboration*

Elaboration was measured using the HICLAS programme. The level of elaboration for both the 'self after the incident' and the 'self when driving a train after the incident' was 2, with a higher number indicating the elements are more elaborated. Compared to the group mean of 3.1 for both, Michael is therefore below average. This supports the hypothesis that greater elaboration leads to higher psychological distress. As mentioned in the introduction it is suggested by Sermpezis and Winter (2009) that distress following traumatic events is caused by the event being over-elaborated and therefore construing is dominated by the event. The level of elaboration of the 'person who committed suicide' was 1, compared to the group mean of 2.1, Michael is therefore below average. The level of elaboration of the construct 'traumatised-normal' is also below the group mean of 1.4 at 0. These findings provide support to Sermpezis and Winter's (2009) theory that lower levels of elaboration of traumatic events lead to lower levels of psychological distress.

### *Content Analysis*

An analysis of the content of Michael's constructs revealed that most of his constructs fall into the personal area of the CSPC. An example of a construct of Michael's that fell into this

category is 'cautious-reckless'. Only one of Michael's constructs was categorised as moral. This supports the hypothesis that the number of moral constructs will be positively correlated with IES-R scores.

*Thematic Analysis*

A number of initial themes were developed from Michael's interview. The thematic development maps below (Figure 34) show the initial stages of theme development.

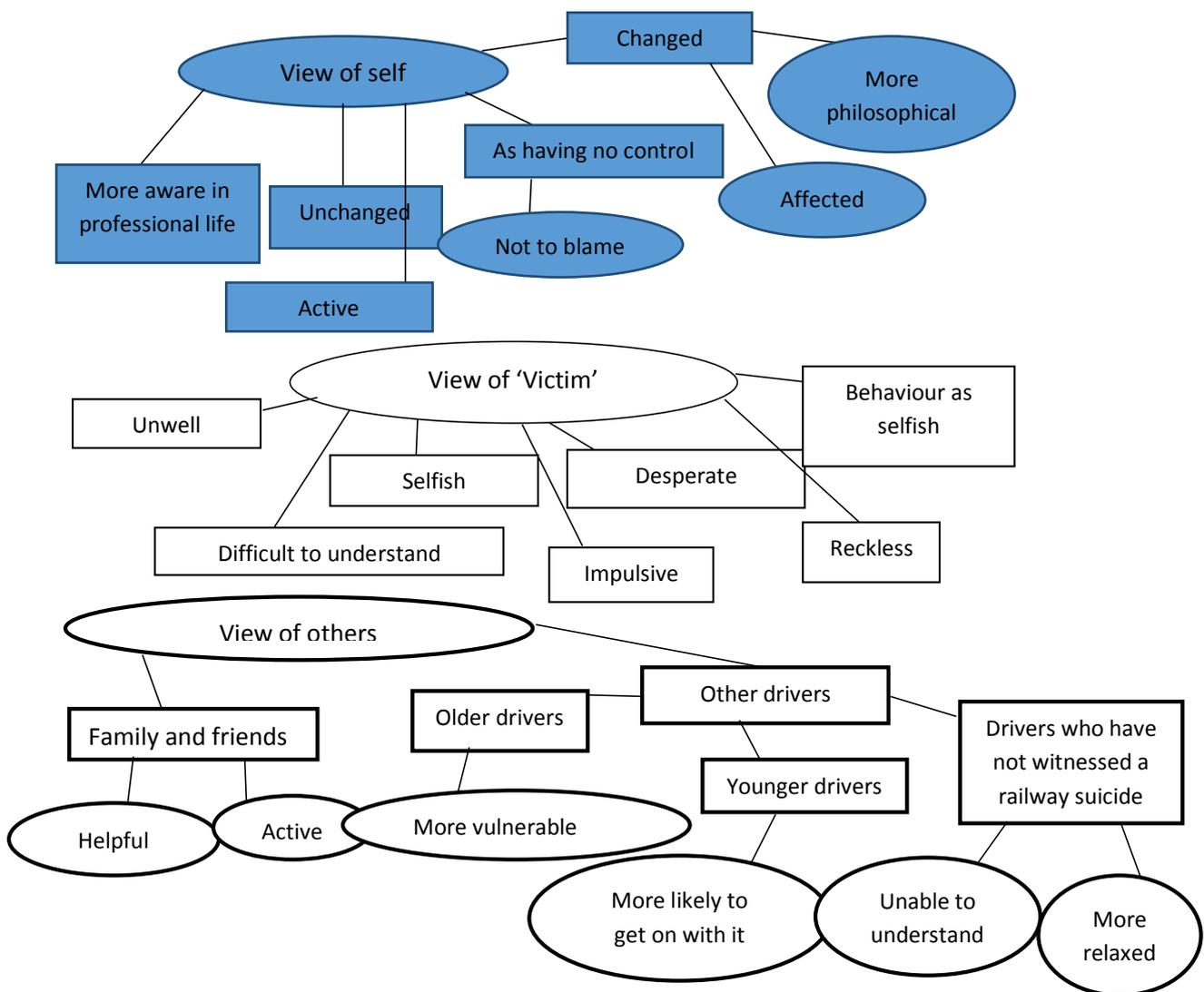


Figure 34. Initial thematic map showing three main themes.

The superordinate themes were again related to the main research questions and remained constant as 'view of self', 'view of others' and 'view of person who committed suicide (victim)'. These superordinate themes were then divided into further themes and final themes

reached through a process of combining, refining, separating and discarding (Braun & Clark, 2006).

## View of self

The main themes identified in terms of Michael's 'view of self' are presented below in Figure 35.

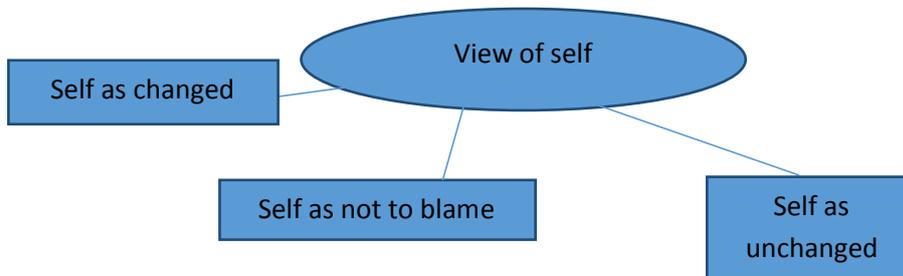


Figure 35. Final Thematic Map for 'View of Self'

Throughout the interview Michael emphasised that he felt the incident had not changed him personally. He therefore felt that it made sense that the PCA plot also suggested that this was the case. Michael's sense of being largely unchanged by the experience is illustrated by the following quote:

*"I wouldn't say it's made any great changes to me outside of the job".*

When Michael did talk about his 'self as changed' following the incident, he spoke about how in his working life he is more aware both in terms of his alertness when driving, but also about the nature and consequences of such incidents. He therefore agreed with the movement of his current self when driving a train as closer to the construct pole 'aware'. A sense of Michael's increased awareness is illustrated by the following quote:

*"When you've had a suicide... you're more aware of what's just in front of your train... because it may be a trespasser who's going to do something... If they're on their own your first thought now is towards the brake because you're thinking, are they going to do it?"*

Michael also spoke of some initial reactions following the incident including 'shock', anger, and sadness and he spoke about the fact that he can 'still picture him'. These reactions are highlighted by the following quote:

*“I think even if it doesn’t really affect me, I’ll never forget it, put it that way... I’ll still see his face and still picture him and could tell you what he looks like and everything.”*

Although Michael emphasised that he did not feel he had changed ‘drastically’ there was a strong theme throughout the interview of the philosophical approach Michael seemed to adopt in relation to the incident, and how this had slightly changed his outlook on life. Some of Michael’s feelings around this are highlighted by the following quote:

*“I think you always feel that you try to be in control of your own destiny, of your own fate, but I just think now sometimes you’ve just got to go with things a little bit, because sometimes you can’t always control a situation, as I had no control over that. Doesn’t matter what I did, that happened and that guy was going to do it”*

This highlights both the philosophical approach that Michael seemed to actively adopt following the incident - ‘you have to try and be philosophical about it’ and how this has translated to him going ‘with the flow a bit more’ and a realisation that you cannot always have control over situations in life. Michael therefore felt that it made sense that his self now (both personally and professionally) was more closely aligned to the construct pole ‘philosophical’ than his self before the incident. It is of interest to note that the construct philosophical-traumatised was identified as one of the more superordinate in Michael’s construct system, and adopted a position above average in comparison to the whole sample. It was clear in the interview the conscious decision Michael had taken to adopt this approach to the incident, supporting the idea that this construct was one he was very aware of.

There was also a strong theme throughout the interview that Michael was not to blame for the incident, and could not have done anything differently, ideas that were mentioned eighteen times throughout the interview. An example of one of these instances is given below:

*“I took myself away from being somebody who killed somebody because I wasn’t. He killed himself, I didn’t kill him. I couldn’t have changed that”.*

## View of the person who committed suicide (the ‘victim’)

The main themes identified in terms of Michael’s view of the ‘victim’ are presented below in Figure 36.

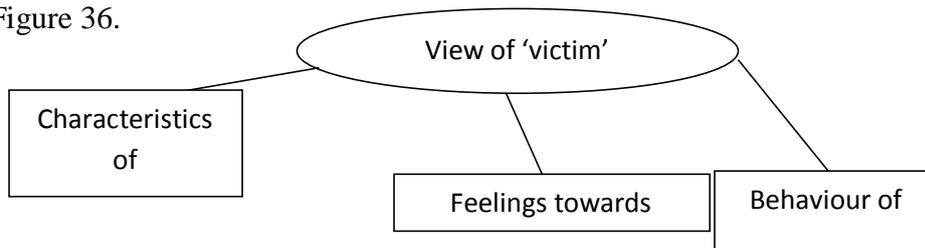


Figure 36. Final thematic map for view of the ‘victim’.

Michael rarely expressed direct feelings towards the ‘victim’. At one point Michael did express anger towards him stating ‘angry because why did that person have to do this to me’ and ‘what gives him the right to do that?’

In terms of characteristics, Michael seemed to view the ‘victim’ as someone who was difficult to understand and this is highlighted by the following quote:

(Q: So the person who committed suicide is on the edge here which suggests that you view them as very different to anybody else. Would that be something you would agree with?)

*“Yeah, I mean you cannot even begin to think what was going through his mind when he stepped in front of a train. To be so young and to want to do that. I mean you just can’t even begin to think what’s going through their mind”.*

Only on one occasion did Michael describe the person as ‘selfish’. The lack of moral judgements regarding the ‘victim’ throughout the interview is in line with the fact that the content analysis of Michael’s repertory grid identified the CSPC area of personal as the most frequently used. Instead Michael referred to the ‘victim’s’ **behaviour** as ‘selfish’ and ‘thoughtless’, suggesting he was able to separate the person from the act.

Throughout the interview Michael talked of how initially following the incident he viewed the ‘victim’ as ‘just a’ person with whom he had ‘no connection’ and who he ‘just happened to hit with a train’. There seemed to be a significant degree of depersonalisation and this is further highlighted by the following quote:

*“For all I know he’s an alien”*

Michael spoke about the effect on him of finding out the name and age of the ‘victim’, and some of his feelings are illustrated in the quote below:

*“Once a name and an age and this guy from BTP told me everything about him, life story that sort of almost put me back a little bit.”*

(Q: Why do you think that was?)

*“Because then he became a person. He became a somebody. He became somebody’s son or somebody’s partner. When I didn’t know his name or his age or anything about him he was just somebody I happened to hit with a train, but I think once the guy told me his name and his age and his mum and his dad and I thought, hold on a minute, now this is somebody’s son”.*

Michael agreed with the PCA plot’s suggestion that he viewed the ‘victim’ as being closely aligned to the construct poles of ‘confused’, ‘desperate’, ‘traumatised’, ‘reckless’ and ‘not as happy’. In fact there was a strong sense throughout the interview that he viewed them as somebody who was mentally unwell. This is illustrated by the following quote:

*“Obviously something was missing... Obviously got some mental issues”*

### **View of others**

The main themes identified in terms of Michael’s ‘view of others’ are presented in Figure 37 below.

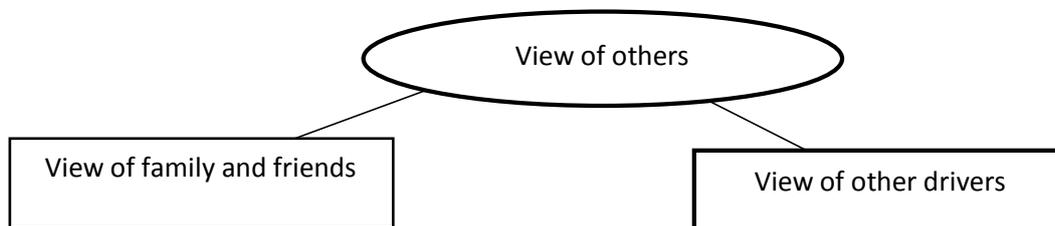


Figure 37. Final thematic map for view of others.

Michael described a lot of positive feelings towards his family and friends in relation to the support they gave him following the incident. He described having ‘a lot of people’ taking him out to do things, and that the time of the year helped in that the good weather meant he could be outdoors. He described both those factors as helping with his ‘recovery’. Some of Michael’s feelings towards his family and the support they gave him are captured by the following quote:

*“I think their view was if I want to talk about it. I’ll talk about it. And that worked for me”.*

In terms of Michael's view of other drivers, Michael identified with the PCA plot's suggestion that he viewed drivers who had not witnessed a railway suicide as very different to himself following the incident, as illustrated by the following quote:

*"You need first-hand experience to understand what it's like"*

He also felt that older drivers were perhaps more vulnerable to the negative effects of witnessing a railway suicide when compared to younger drivers, as illustrated by the following quote:

*"Maybe if some of the younger guys they've got things and they just go out there and get on with it again because they've got a lot of their life to lead. But I'm certainly speaking from my experience that older drivers are more likely to be off for longer, because I don't know, I suppose once you've been doing your job a long time if it keeps happening you think, "What's the point?""*

This is a theme not picked up by the repertory grid, but more present in background information questionnaire.

The clarity and lack of contradictory themes throughout Michael's interview are perhaps reflective of his relatively tight construct system, providing further support for the idea that tighter construing could be protective following a traumatic incident.

## CHAPTER FOUR: DISCUSSION

In this chapter the main findings are discussed in relation to the aims of the research, and the relevant literature previously reviewed in the Introduction. The clinical implications and limitations of the research are discussed, followed by suggestions for future research.

### 4.1 Overview of Research Aims

The aims of the research were to:

1. Explore the personal construct systems of train drivers involved in railway suicides using repertory grid technique (Kelly, 1955), and explore any relationships between the repertory grid measures and the psychological impact of the event.
2. Explore the content of train drivers' construing (Feixas et al. 2002), and explore any relationships between this content and the psychological impact of the event.
3. Consider how an individual's construing of themselves and others following a traumatic event can be used clinically, and how this may impact on the policies and working practices of the companies whose drivers are often directly involved in the traumatic event of a railway suicide.
4. Assess the influence of personal and contextual factors (such as age, gender and whether the incident occurred in the dark) on the psychological impact of the event on the driver.

Each of these aims will be addressed in turn, following a presentation of the characteristics of the sample.

### 4.2 Sample Characteristics

Participants' scores on the present measure of the IES-R (mean 40.87) were significantly lower than their scores on the past measure of the IES-R (mean 12.87), suggesting that for the majority of participants the psychological impact of the event had lessened substantially from its peak. These results suggest that the majority of participants experienced a substantial acute stress reaction following the incident, but that at the time of the research relatively few were experiencing distress of a severe nature. This is comparable to research discussed in the Introduction that suggests a significant initial effect but that severe and long lasting effects are relatively uncommon (Farmer et al., 1992; Tranah & Farmer, 1994). However, a third of the sample reported that following the incident they had been given an official diagnosis of PTSD,

suggesting that the prevalence of PTSD in this population is perhaps not as uncommon as some research has suggested.

Results of the subscale analysis indicated that for the past measure of the IES-R, participants scored significantly higher on the intrusion subscale in comparison to their scores on the avoidance and hyperarousal subscales. This is comparable to previous research which has found a higher level of intrusion symptoms in rescue and recovery workers following traumatic events (Guo et al., 2004; Leykin, Lahad & Bonne, 2013; Perrin et al., 2007) and points towards a possible benefit of focusing on these symptoms when working psychologically with these populations.

### 4.3 Responding to the Research Aims

#### **4.3.1 What relationships exist between repertory grid measures of participants' construing and the psychological impact of the event?**

##### 4.3.1.1 Tightness of Construing and Distress

There was no significant relationship between the measure of the tightness of participants' construct systems and their scores on either the past or present form of the IES-R. Scatterplots indicated a negative correlation for the present measure of the IES-R, but the statistical analyses carried out did not reach significance, possibly due to the small sample size. Nevertheless, it is important to acknowledge that this result suggests that tighter construing is associated with lower levels of psychological distress following a traumatic event. This is in the opposite direction to what the research predicted.

Kelly (1955) highlighted that very loose construing could be as problematic as very tight construing, and that the optimal state is in between the two extremes. It should also be noted that 'successful' completion of the Creativity Cycle involves re-tightening of an individual's constructs. Following a railway suicide (a potentially life changing event likely to be outside the range of convenience of a driver's construct system) a degree of invalidation could be said to have taken in place, in response to which it would be hoped that the driver would loosen their construing to account for this new experience, and then re-tighten incorporating it into their construct system. Problems can occur when construing is initially so tight that an individual cannot reconstrue, or when an individual's construing becomes so loose following the event that they cannot re-tighten their construing, leading to them being unable to make

concrete predictions about the world. Both situations are therefore thought to lead to anxiety. It may be therefore that participants in this research who had tighter construct systems tended to have somewhat lower scores on the IES-R because over time they had been able to pass through the stages of the Creativity Cycle. This view is supported by research by Chadwick (2011), who investigated recovery in psychosis using personal construct methods, and found that differentiation in the different selves of an individual with psychosis (believed to represent tightness of construing) was greater (i.e. less tight) in those participants in the low to moderate recovery group, and lower in those participants in the high recovery group. Chadwick (2011), suggests that in order to progress towards recovery, an individual first loosens and then tightens up their construing process. The results of the thematic analyses conducted in this current research also lend support to this view. A strong theme throughout Luke's interview was a sense that his predictions about the world, self and others had been invalidated and his contradictory account of his feelings towards both himself and others since the incident appeared to reflect relatively loose construing (supported by him having a below average tightness score in comparison to the sample). He spoke about becoming more cynical and how he now believed that you could not predict either your own or others' reactions to events, or indeed how your life would pan out. It could be hypothesised that as it had been less than a year since the incident, Luke was still in a process of loosening his constructs and was perhaps having some difficulty integrating his experience in order to allow him to retighten his construing again, leading to a significant amount of anxiety. This could therefore explain why he had one of the highest IES-R scores in the sample.

#### 4.3.1.2 Extremity of Ratings and Distress

There was no significant relationship between either the number of extreme ratings in participants' repertory grids, or the number of extreme ratings applied to the element 'person who committed suicide', and the psychological impact of the event as measured by the IES-R. There have been conflicting findings regarding whether the number of extreme ratings in a grid can be used as a measure of psychopathology, and this research seems to suggest that further exploration is needed.

#### 4.3.1.3 Superordinancy of construing and distress

There was a significant negative correlation between the superordinancy of the construct 'traumatised' and both past and present measures of the IES-R. Therefore, the more superordinate the construct the lower the psychological impact of the event. This was in the

opposite direction to what was predicted. It could be hypothesised that for participants in this research, having a developed (and therefore superordinate) idea of traumatisation enabled them to make sense of what happened. This idea is supported by the information processing theories of trauma discussed in the Introduction, which state that psychopathology following traumatic events results from the trauma memory being insufficiently processed and integrated, leading to the traumatic memory interfering with everyday information processing. Other theories of this kind also argue that emotional processing of the traumatic experience needs to occur, and that this can only be achieved by the person being exposed to all the information regarding the event. For one of the participants in the current research, Michael, his 'traumatised' construct was one of his more superordinate constructs and he closely aligned himself to its implicit pole, 'philosophical'. Throughout his interview Michael talked about how his attempts towards being philosophical about what had happened to him were part of a very conscious and active process (hence the construct's superordinancy). It therefore could be suggested that Michael had been acutely aware of the incident's ability to leave him traumatised but had been able to move towards the preferred pole of philosophical eventually allowing him to take a positive outlook on his experience.

#### 4.3.1.4 Conflict and Distress

There was no significant relationship between either the amount of conflict associated with the current self (personal or professional), or the 'person who committed suicide', and participants' scores on either the past or present measure of the IES-R. However, an examination of the scatterplot for the amount of conflict associated with the 'person who committed suicide' and participants' past scores on the IES-R suggests a small negative correlation. Although this did not reach significance, it is of interest to note this finding, which is in the opposite direction to what was predicted. It suggests that participants who had a higher degree of conflict associated with the element 'person who committed suicide' had a lower psychological impact of the event.

Bell (2004b) described conflict as inconsistency in construing, but Winter (1983) had earlier posited that logical inconsistencies in construct relationships could be viewed as complexity rather than as conflict. It could be argued therefore that participants in this research for whom the suicide had had a lower impact had a somewhat more complex view of the 'person who committed suicide' allowing them to see them as both someone who was selfish but also someone who was vulnerable, and increasing their ability to empathise with them. As

highlighted in the Introduction, Brockhouse et al. (2011) found that empathy was a positive predictor of post-traumatic growth. This idea is however only very tentative, and will require further investigation before firm conclusions can be drawn.

It should also be noted that in her investigation into levels of secondary trauma Warner (2011) also did not find any significant relationship between overall conflict concerning the element 'self after the event' and level of secondary trauma. However, as in this research, the sample size used was small at 21 participants. In light of these findings it is clear that more research into the relationship between conflict and measures of psychological distress needs to be conducted. Furthermore, Bell's approach is considered a relatively new measure of conflict, and as highlighted by Caputi, Bell and Hennessey (2012) more work is needed before it is either used routinely, or accepted as valid.

#### 4.3.1.5 Elaboration and Distress

There were no significant relationships between the level of elaboration of the current self (personal or professional) and participants' scores, on either the past or present measure of the IES-R. Analysis of the scatterplots however, suggest a negative correlation between elaboration of both the personal and professional self and the present IES-R scores, therefore suggesting that the more elaborated the self after the event the lower participants' current distress in relation to the incident. This is in line with what was predicted and lends support to t Sewell's (1990) PCP model of trauma outlined in the Introduction. This model suggests that psychopathology following trauma results from the trauma becoming under-elaborated and forming a fragmented trauma related construct subsystem, which is not integrated within the individual's overall construct system. Ideas around whether trauma psychopathology is the result of under or over-elaboration are still controversial however, and centre mainly on the fact that research has found conflicting findings depending on whether the emergent or implicit poles of constructs are used in the analysis (Moes, 1997). As highlighted in the Introduction, Sermpezis and Winter (2009) found support for the idea that trauma is actually over-elaborated in the individual's construct system when both poles of the constructs were used in the analysis. However, both the Sermpezis and Winter (2009) research and the research Sewell used to support his model (Sewell, 1996; Sewell et al. 1996) were based on repertory grids that used life events as elements, whereas the current research used people as elements. It may be therefore that the level of elaboration might differ depending on the elements used. Warner (2011) used people as elements in her research into secondary trauma in Samaritans volunteers,

and found no significant relationships between elaboration of the self after the event and symptomatology on either emergent or implicit poles. It is therefore clear that the picture regarding elaboration remains confused and requires further investigation. Nevertheless, this finding is similar to the finding that the superordinacy of the ‘traumatised’ construct was negatively correlated with participants’ scores on both the past and present measure of the IES-R, lending support to the theory that trauma related psychopathology is linked with the event being under-elaborated and therefore unprocessed.

#### 4.3.1.6 Distances and Distress

There were no significant relationship between dissimilarity in the construing of the self before the event (personal or professional) and the current self (personal or professional) and participants’ scores on either the past or present measure of the IES-R. This is not what was predicted. However, examination of the scatterplots suggested that there was a small positive correlation for both the personal and professional self with the present measure of the IES-R. It is likely that the small sample size meant there was not enough statistical power to detect a significant result.

There was a significant positive relationship between dissimilarity in the construing of the current self (personal and professional) and the ideal self, and present scores on the IES-R. Therefore the larger the discrepancy between individuals’ construing of the self and ideal self, the higher their scores on the IES-R.

There was no significant relationship between dissimilarity in the construing of the current self (personal or professional) and drivers who have not witnessed a railway suicide and either past or present IES-R scores. However, examination of the scatterplots suggested a small positive correlation for present IES-R scores, suggesting that the more dissimilar participants viewed themselves from drivers who had not witnessed a railway suicide, the higher the psychological impact of the event. This is in line with what was predicted. Again it is likely that the small sample size meant that there was not enough statistical power to detect a significant result.

There was no significant relationship between dissimilarity in construing of the current self and the person who committed suicide, and scores on either the past or present measure of the IES-R. Examination of the scatterplot revealed that the majority of participants construed the person who committed suicide as very different to themselves, regardless of their scores on the IES-R. A possible explanation for this finding is provided by Kelly (1955), where he states ‘it

helps to clarify our stand as a nonevildoer by making it clear that the evildoer is not one of us' (p. 373). Kelly states that the evildoer exemplifies 'what we might do... what we might be... or what we would have been' (p. 372) if we did not try so hard not to, and therefore they have to be seen as very different. Similarly, perhaps in this situation it is important for drivers not to relate to the person who committed suicide, since otherwise they too could see themselves as vulnerable in terms of their own mental health. This idea is further supported by the finding that on average 8 out of the 11 constructs applied to the element 'person who committed suicide' were given an extreme rating. This is a high number and again highlights how differently the drivers rated this element compared to the others in the grid.

Sewell (2003) uses a metaphor of sitting in a barber's chair to illustrate how trauma can lead to discrepancies in how an individual views the self and others. He asks readers to imagine sitting in the chair with one mirror in front of them and one behind them, where the images constantly reappear in both the front and back. He states that the back image represents the past and the front image the future, whilst the chair represents the present. A trauma is said to result when the figure in the chair (present self) is significantly different from the image in the back mirror (past self), and therefore predicting what will appear on the front mirror is not only extremely difficult but potentially distressing. Following a traumatic event, trauma related psychopathology could therefore be said to be linked to an individual being unable to reconcile their past self with their present self, in order to make predictions about their future.

These results support previous findings that have found a relationship between changes to one's view of the self and others and psychological distress (Button, 1990; Freshwater, Leach et al., 2001; Harter, 2000; Harter & Niemeyer, 1995; Sewell & Williams, 2002).

#### **4.3.2 What relationships exist between the content of train drivers' construing (Feixas et al. 2002) and the psychological impact of the event?**

There was a significant positive relationship between the number of moral constructs employed by participants and the present psychological impact of the event. Thus, the more moral constructs employed, the greater the present reported psychological impact of the event. This is in line with what was predicted. On examination of the content of drivers' construing, the second most frequent category utilised by drivers, after balanced-unbalanced, was 'altruist-egoist', referring to constructs such as 'selfless-selfish' and 'is concerned about others-thinks only of oneself'. It was highlighted in the Introduction that suicide is widely conceptualised as a selfish act and could be construed as a violation of morality. This appears to have been

supported by train drivers' construing being dominated by the negative poles of moral constructs. Prinz (2006) argues that when we judge that something that has happened is wrong, and when this wrongdoing is against us, then a typical emotional response is anger. Interestingly Orth and Wieland (2006) state that anger is a 'prevalent component of PTS reactions' (p. 698) and in their meta-analysis of 39 studies into the association between anger, hostility and PTSD in trauma-exposed adults found a large effect size. Therefore it could be argued that the higher number of moral constructs reflected a greater degree of anger in this sample and that this provides a possible explanation for the higher IES-R scores.

There was also a significant positive relationship between the number of moral constructs attributed to the element 'person who committed suicide' and participants' present scores on the IES-R, possibly for similar reasons to those described above.

As predicted, a significant negative relationship was found to exist between the number of emotional constructs employed by participants and the present measure of the psychological impact of the event. This result supports previous research that has found that individuals who have been exposed to traumatic events have a limited use of emotional constructs in contrast to people who have not experienced such events (Bhandari et al., 2011; Harter, 2000; Harter, Alexander, & Neimeyer, 1988; Harter, Erbes, & Hart, 2004; Harter & Neimeyer, 1995; Leach et al., 2001), possibly because as proposed by Harter, Erbes, & Hart (2004) the 'use of fewer constructs related to emotional arousal (and) more concrete, physical and factual descriptions may reflect the emotional numbing characteristic of trauma survivors' (p. 40). Furthermore Feeny, Zoellner, Fitzgibbons and Foa (2000) found that emotional numbing was associated with PTSD severity. The results from the current research therefore lend support to existing research that shows a link between emotional numbing and PTS reactions.

The contrast poles of the supplied construct 'traumatised' were also examined and it is of particular interest to note that one third of the sample pole used the contrast pole 'normal'. This construct was categorised under the CSPC category of 'Balanced-Unbalanced'. This could be interpreted as suggesting that being traumatised by an event makes a person 'abnormal' or 'unbalanced', and therefore highlights that the stigma associated with experiencing an emotional reaction following such an event has the potential to exist in this population.

#### **4.3.3 What relationships exists between personal and contextual factors (such as age, gender and whether the incident occurred in the dark) and the psychological impact of the event on the driver?**

Unfortunately due to the small sample size obtained, the planned statistical analyses on the link between personal and contextual factors and the psychological impact of the event were not able to be carried out. Themes related to personal and contextual factors were however present in the thematic analyses.

A strong theme throughout Luke's interview was his belief that the unsatisfactory way in which his employers managed the situation contributed to why he found it such a difficult experience. During informal discussions with driver managers when recruiting for the study, it became apparent to the current researcher that there is a lack of a standard protocol for dealing with these incidents, and that aftercare and support, as well as training for managers in order to best assist their employees, varies in both quantity and quality across different train operating companies. This is evidenced by the fact Michael spoke of the positive experience he received from his employers following his incident and of a drive within his company to move towards devising a standard protocol.

Michael felt that several personal and contextual factors helped him to manage with the incident, and these largely centred on the positive support he received from his family and friends, and that the time of year the incident happened meant that he could get out of the house and keep busy. The thematic analysis also highlighted the controversial issue of the fact that drivers are often called to attend coroner's court to give a statement. For Michael hearing intimate details about the person and their family appeared to 'set him back'. Luke had yet to attend coroners' court at the time of his interview, but spoke of his hope that hearing someone 'official' say that the driver 'is not to blame' would give him 'closure'. This is therefore an issue that requires further investigation.

Michael felt that from his experience older drivers found it more difficult to cope with witnessing a suicide. He felt this was because they had less to move them forward in their life compared to younger drivers with young families.

Luke spoke about how he was going through a difficult situation in his personal life at the time of the incident, and felt that although no time would be a good time for such an event to happen, for him it probably happened at 'the worst possible time'. This supports previous evidence that has found a link between the presence of other stressors at the time of the traumatic event and more severe psychological reactions (Braun, Andrews, & Valentine, 2000; Cothreau et al. 2004; Limonsin et al. 2006).

These findings therefore suggest that the influence of both personal and contextual factors is important to consider when planning for and managing the after effects of these incidents.

#### 4.4 Thematic Analyses

Three main themes appeared to be common across both the thematic analyses conducted: the suddenness of the incident and how difficult that was to cope with, the changes to the drivers' sense of self that followed, and a belief that no one else could understand the impact of the incident unless they had been through it themselves. These themes are similar to three of the themes identified by Rassool & Nel (2012) in their study into experiences of causing an accidental death – 'trying to make sense of a life changing moment', a 'changed sense of self' and 'nobody being able to understand'.

#### 4.5 Clinical Implications of the Research

The psychological impact experienced following witnessing a railway suicide was evident for all fifteen participants that took part in this research by the high scores reported on the IES-R for the time period immediately following the event. Although all participants were in active service at the time of the research, some had been absent from work for several months following the incident, most had received counselling, and a third of the sample had been given an official diagnosis of PTSD following the incident. These findings provide a significant contribution to our understanding of how these unique traumas impact upon train drivers, highlighting that the fact that the incident was a suicide does not ameliorate the effect of not only being witness to the sudden and violent death of another human being, nor being the individual in charge of the piece of machinery that has been the method of this death.

Support appears to be available, but in varying degrees of both quantity and quality, highlighting the need for the BRN to consider establishing a standard protocol for managing the aftermath of such incidents and to look at providing training for the people involved in supporting drivers during this time.

Whilst highlighting commonalities, the research has also highlighted the individualised responses of drivers to witnessing a railway suicide, and the fact that loss of control following the incident appears to impact on drivers significantly. This highlights the need for managers and train operating companies to provide drivers with information about what procedures they have to go through following the incident and why they have to go through them, and wherever

possible working with the driver to discuss their needs and wishes, to enable them to feel that they have some control over the events after the incident.

A major implication of this research concerns how an individual's construing of a traumatic event can be used clinically. The finding that individuals who used fewer emotional constructs reported a significantly higher psychological impact of the event suggests that individuals need to be supported to be able to emotionally process the content of the trauma, in line with current models of working with trauma. The finding that individuals with a more elaborated 'traumatised' construct reported less psychological distress, suggests that the traumatic event needs to be elaborated and integrated into the individual's construct system. This is also in line with Sewell and Cromwell's (1990) current PCP model of trauma. The finding that train drivers' construing was dominated by themes relating to blame and a difficulty balancing both positive and negative feelings towards the 'victim', highlights the need for professionals working with drivers following such incidents to focus on issues such as anger and responsibility, factors that are not usually considered in generic PTSD models, and reflect the unique nature of this trauma. The findings also suggest that it might be beneficial to work on the discrepancy between the individual's views of the self after the incident and their ideal self, in order to reduce the psychological impact of the event. This may be achieved by helping them to re-construe the ideal self in light of the new evidence, or helping the individual remove barriers preventing them from moving closer to their ideal self. The findings also suggest the importance of tightening up construing following a traumatic event in order to reduce long term anxiety, and suggest that individuals may need help completing the Creativity Cycle. Despite the statistical analyses not reaching significance there was a positive relationship between the reported dissimilarity between drivers' current selves and drivers who had not witnessed a railway suicide and participants' reported distress. The thematic analysis also suggested the drivers felt that nobody could understand the impact of such an experience unless they had been through it themselves. These findings suggest it may be important for train operating companies to consider setting up a peer support system where drivers have the chance to be put in contact with other drivers who have been through the same experience, helping them to feel less alone and normalise their thoughts and feelings.

#### 4.6 Limitations of the Research

The main limitation of this research is the cross-sectional, correlational nature of the design. This means that causal inferences cannot be made. Thus, although some of the repertory grid

measures have been shown to be correlated with participants' scores on the IES-R, this does not necessarily indicate a causal relationship. Also because of the cross-sectional nature of the design, it cannot be ascertained whether the hypothesised causal variable (the variations in construing) preceded the effect variable (IES-R scores) or whether the characteristics of construing were an effect of the IES-R scores.

A second major limitation of the current research is the small sample size. Despite the researcher contacting all the train operating companies in the South and East of England early on in the development of the research, recruitment was slow and challenging. Many companies refused to participate as they were worried their drivers would be re-traumatised by the process, despite the researcher's reassurances and evidence to the contrary. On several occasions the researcher was told that it was a 'sensitive area' and that managers were therefore unwilling to allow their drivers to take part.

Due to the difficulties in recruiting no time limit was placed on when the incident had to have occurred (as long as at least three months had passed), and this led to a large variance within the sample. This adds a significant extraneous variable to the research, and therefore further impacts on the degree to which the observed correlations can be viewed as being the result of variations in construing. It also means that many participants were relying on retrospective memory, which is subject to inaccuracies.

Finally, it cannot be assumed that the final sample obtained is representative of all train drivers currently in active service in the UK. Despite the homogeneity of the sample in terms of background, it is possible that those drivers who were still experiencing significant negative effects following their incident decided not to take part for fear of participation adding to their difficulties.

#### 4.7 Suggestions for further research

There are many further avenues to explore in relation to this research. It is clear that further work is needed on the PCP model of trauma, as although this study added support to Sewell and Cromwell's model (1990), there still remain controversies and inconsistencies amongst the research that has sought to test this model. Further research is needed so as to further explore what could potentially be an important treatment model for posttraumatic reactions that become chronic and debilitating.

As far as the author is aware this research is the only study to look exclusively at the impact of railway suicides on train drivers in the BRN. As the topic of railway suicide becomes more prevalent in the media it is important that the effects of such incidents on the workers involved is not lost. Further research with larger sample sizes is therefore needed into the psychological effects of witnessing a railway suicide so that train operating companies and professionals have the information about how best to support drivers both before and after such incidents.

It would be beneficial for future research to also include those drivers who are no longer in active service, as they are likely to be able to provide additional and perhaps different information as to how drivers are affected and information about why they chose to leave after their incident.

During this research the researcher was also made aware of the many other workers involved in the aftermath of a railway suicide, and who have very little support and recognition, such as those involved in the 'clean-up', members of the BTP, driver managers, and engineers. Further research should therefore also consider these groups.

#### 4.8 Concluding Remarks

Railway suicides are a frequent and increasing occurrence on Britain's railway networks, with on average one person a day trying to take their life on the railway, and recent initiatives such as that by the Samaritans and Network Rail have focused on trying to achieve a 20% reduction in the number of railway suicides by 2015 (Samaritans, 2013), recognising the far reaching implications suicide on the tracks can have. Despite this initiative visible research into the psychological impact of witnessing a railway suicide has been very limited.

Using a cross-sectional design, this research attempted to investigate train drivers' experiences of witnessing a railway suicide using mixed methodology, including a background questionnaire, a measure of the psychological impact of the event, an exploration of the drivers' personal construct systems using a repertory grid technique (Kelly, 1955) and thematic analysis of two case studies.

The findings indicated that most drivers experienced symptoms suggestive of a significant PTS reaction following the incident, and although for many this appeared to be short-lived, for some the incident had longer lasting effects, with a third of the sample having been given an official diagnosis of PTSD.

The findings indicated a significant negative correlation between the superordinancy of the construct 'traumatised' and participants' reported psychological distress, providing support to Sewell and Cromwell's (1990) model. Discrepancies between participants' current and ideal selves were significantly positively correlated with participants' reported distress, providing a possible direction for treatment of individuals following traumatic events. Support was also found for emotional processing models of trauma by the finding that participants who were using fewer emotional constructs reported higher levels of psychological distress.

Overall, this research challenges train operating companies to consider the psychological impact of what has been construed as an 'occupational hazard' on their employees, and highlights the need to invest in further research into how drivers and other workers can be best supported following these violent and traumatic events.

## REFERENCES

- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3<sup>rd</sup> ed., text rev.). Washington, DC: Author.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed., IN PRESS). Washington, DC: Author.
- Anderson, T. (2005). *PTSD in children and adolescents*. University of Illinois at Chicago, Great Cities Institute Report No. GCP-05-04). Retrieved May, 26(2013), 2005-04.
- Batterham, P. J., Calear, A. L., & Christensen, H. (2013). The Stigma of Suicide Scale: Psychometric properties and correlates of the stigma of suicide. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 34(1), 13-21.
- Beck, J. G., Grant, D. M., Read, J. P., Clapp, J. D., Coffey, S. F., Miller, L. M., & Palyo, S. A. (2008). The Impact of Event Scale–Revised: psychometric properties in a sample of motor vehicle accident survivors. *Journal of anxiety disorders*, 22(2), 187.
- Bell, R. C. (2004a). Gridstat. A Program for Analysing the Data of a Repertory Grid. Version 4.0. Department of Psychology: University of Melbourne.
- Bell, R. C. (2004b). A new approach to measuring inconsistency or conflict in grids. *Personal Construct Theory and Practice*, 1, 53-59.
- Bhandari, S., Winter, D., Messer, D. & Metcalfe, C. (2011), Family characteristics and long-term effects of childhood sexual abuse. *British Journal of Clinical Psychology*, 50: 435–451.
- Bisson, J. I. (2009). Psychological and social theories of post-traumatic stress disorder. *Psychiatry*, 8(8), 290-292.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.

- Brewin, C. R., Dalgleish, T., & Joseph, S. (1996). A dual representation theory of posttraumatic stress disorder. *Psychological Review*, *103*(4), 670-686.
- Brewin, C. R., Andrews, B., & Valentine, J. D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology*, *68*(5), 748-766.
- Brewin, C. R., & Holmes, E. A. (2003). Psychological theories of posttraumatic stress disorder. *Clinical Psychology Review*, *23*, 339-376.
- Brockhouse, R., Msetfi, R. M., Cohen, K., & Joseph, S. (2011). Vicarious exposure to trauma and growth in therapists: The moderating effects of sense of coherence, organizational support, and empathy. *Journal of Traumatic Stress*, *24*(6), 735-742.
- Burnham, S. (2008). *Let's Talk: Using Personal Construct Psychology to Support Children & Young People*. London: Sage Publications Ltd.
- Butler, R.J., & Green, D. (Eds.). (2007). *The Child Within: Taking the Young Person's Perspective by Applying Personal Construct Psychology (2<sup>nd</sup> ed.)*. Sussex, England: John Wiley & Sons Ltd.
- Button, E. J. (1990). Rigidity of construing of self and significant others and psychological disorder. *British journal of medical psychology*, *63*(4), 345-354.
- Caputi, P., Bell, R., & Hennesey, D. (2012). Analysing Grids: New and Traditional Approaches. In P. Caputi, L. Viney, B. Walker & N. Crittenden (Eds.), *Personal Construct Methodology* (pp.159-183). Chichester, England: John Wiley & Sons Ltd.
- Chadwick, S.L. (2011). *Investigating Recovery in Psychosis: A Repertory Grid Study* Unpublished Doctoral Thesis, University of Hertfordshire, Hertfordshire, England). Retrieved from <https://uhra.herts.ac.uk/handle/2299/6372>.
- Chemtob, C., Roitblat, H., Hamada, R., Carlson, J., & Twentyman, C. (1988). A cognitive action theory of post-traumatic stress disorder. *Journal of Anxiety Disorders*, *2*: 253-275.
- Coetzee, R. H., & Regel, S. (2005). Eye movement desensitisation and reprocessing: an update. *Advances in Psychiatric Treatment*, *11*(5), 347-354.

- Colucci, E. (2008). The cultural meaning of suicide: A comparison between Italian, Indian and Australian students (PhD Thesis, University of Queensland, Queensland, Australia). Retrieved from <http://espace.library.uq.edu.au/view/UQ:152753>.
- Coolican, H. (2009). *Research Methods and Statistics in Psychology* (5<sup>th</sup> ed.). London, England: Hodder Education.
- Cothereau, C., De Beaupaire, C., Payan, C., Cambou, J. P., Rouillon, F., & Conso, F. (2004). Professional and medical outcomes for French train drivers after "person under train" accidents: Three year follow up study. *Occupational and Environmental Medicine*, 61(6), 488-494.
- Creamer, M., Burgess, P., & Pattison, P. (1992). Reaction to trauma: A cognitive processing model. *Journal of Abnormal Psychology*, 113, 165-174.
- Creamer, M., Bell, R., & Failla, S. (2003). Psychometric properties of the Impact of Event Scale—Revised. *Behaviour Research and Therapy*, 41(12), 1489-1496.
- Cukor, J., Wyka, K., Mello, B., Olden, M., Jayasinghe, N., Roberts, J., Giosan, C., Crane, M. & Difede, J. (2011), The longitudinal course of PTSD among disaster workers deployed to the World Trade Center following the attacks of September 11th. *Journal of Traumatic Stress*, 24, 506–514.
- de Boeck, P., van Damme, G. & van Mechelen, I. (Ed.). (1992). *Hierarchical Classes Analysis Program* (2.0 ed.). Leuven: University of Leuven.
- Ehlers, A., & Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour research and therapy*, 38(4), 319-345.
- Farmer, R., Tranah, T., O'Donnell, I., & Catalan, J. (1992). Railway suicide: the psychological effects on drivers. *Psychological Medicine*, 22(02), 407-414
- Feeny, N. C., Zoellner, L. A., Fitzgibbons, L. A., & Foa, E. B. (2000). Exploring the roles of emotional numbing, depression, and dissociation in PTSD. *Journal of Traumatic Stress*, 13(3), 489-498.

- Feixas, G., Geldschläger, H., & Neimeyer, R. A. (2002). Content analysis of personal constructs. *Journal of Constructivist Psychology, 15*(1), 1-19.
- Fine, B. D. Moore &, Burness, E. (Eds.) (1990). *Psychoanalytic terms and concepts*. New York: American Psychoanalytic Association.
- Foa, E., & Kozak, M. (1986). Emotional processing of fear. *Psychological Bulletin, 99*, 20-35.
- Foa, E.B., Steketee, G. & Rothbaum, B. (1989). Behavioural/cognitive conceptualisations of post-traumatic stress disorder. *Behaviour Therapy, 20* (2), 155-176.
- Fransella, F., Bell, R., & Bannister, D. (2004). *A Manual for Repertory Grid Technique* (2<sup>nd</sup> ed.). England, Sussex: John Wiley & Sons Ltd.
- Frances, A. (2010). Opening Pandoras Box: The 19 Worst Suggestions for DSM5. *Psychiatric Times* Feb 11.
- Frazier, P. A., Gavian, M., Hirai, R., Park, C., Tennen, H., Tomich, P., & Tashiro, T. (2011). Prospective predictors of posttraumatic stress disorder symptoms: Direct and mediated relations. *Psychological Trauma: Theory, Research, Practice, and Policy, 3*(1), 27-36.
- Geoghegan, T. (2010, January 14). Can railway suicides be cut? *BBC NEWS Magazine*. Retrieved from <http://news.bbc.co.uk/1/hi/8456816.stm>
- Grice, J. W. (2002). Idiogrid: Software for the management and analysis of repertory grids. *Behavior Research Methods, Instruments, & Computers, 34*, 338-341.
- Guo, Y.-J., Chen, C.-H., Lu, M.-L., Tan, H. K.-L., Lee, H.-W., & Wang, T.-N. (2004). Posttraumatic stress disorder among professional and non-professional rescuers involved in an earthquake in Taiwan. *Psychiatry Research, 127*(1-2), 35-41.
- Hardison, H.G., & Neimeyer, R.A. (2012). Assessment of Personal Constructs: Features and Functions of Constructivist Techniques. In P. Caputi., L. Viney., B. Walker., & N. Crittenden (Eds.), *Personal Construct Methodology* (pp. 3-53). Sussex, England: John Wiley & Sons Ltd.

- Harter, S., Alexander, P. C., & Neimeyer, R. A. (1988). Long-term effects of incestuous child abuse in college women: Social adjustment, social cognition, and family characteristics. *Journal of Consulting and Clinical Psychology, 56*(1), 5-8.
- Harter, S. L., & Neimeyer, R. A. (1995). Long-term effects of child sexual abuse: Toward a constructivist theory of trauma and its treatment. In R. A. Neimeyer & G. J. Neimeyer (Eds.), *Advances in personal construct psychology*, Vol. 3 (pp. 229–269). Greenwich, CT: JAI Press.
- Harter, S. L. (2000). Quantitative measures of construing in child abuse survivors. *Journal of Constructivist Psychology, 13*(2), 103-116.
- Harter, S. L., Erbes, C. R., & Hart, C. C. (2004). Content analysis of the personal constructs of female sexual abuse survivors elicited through repertory grid technique. *Journal of Constructivist Psychology, 17*(1), 27-43.
- Hjelmeland H Fau - Akotia, C. S., Akotia Cs Fau - Owens, V., Owens V Fau - Knizek, B. L., Knizek Bl Fau - Nordvik, H., Nordvik H Fau - Schroeder, R., Schroeder R Fau - Kinyanda, E., & Kinyanda, E. Self-reported suicidal behavior and attitudes toward suicide and suicide prevention among psychology students in Ghana, Uganda, and Norway. (0227-5910 (Print)).
- Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of Event Scale: A measure of subjective stress. *Psychosomatic Medicine, 41*(3), 209-218.
- Janoff-Bulman, R. (1992). *Shattered Assumptions: towards a new psychology of trauma*. New York: Free Press.
- Jancowicz, D. (2004). *The Easy Guide to Repertory Grids*. Sussex, England: John Wiley & Sons Ltd.
- Kelly, G. A. (1955). *The Psychology of Personal Constructs: Volumes 1-2*. New York: Norton.
- Kelly, G.A. (1970). A brief introduction to personal construct theory. In D. Bannister (Ed.), *Perspectives in Personal Construct Theory*. London: University Press.

- Landfield, A. (1971). *Personal construct systems in psychotherapy*. Lincoln: University of Nebraska.
- Leach, C., Freshwater, K., Aldridge, J., & Sunderland, J. (2001). Analysis of repertory grids in clinical practice. *British Journal of Clinical Psychology*, 40(3), 225-248.
- Lee S Fau - Tsang, A., Tsang A Fau - Li, X.-y., Li Xy Fau - Phillips, M. R., Phillips Mr Fau - Kleinman, A., & Kleinman, A. (2007). *Attitudes toward suicide among Chinese people in Hong Kong*. (0363-0234 (Print)).
- Leykin, D., Lahad, M., & Bonne, N. (2013). Posttraumatic Symptoms and Posttraumatic Growth of Israeli Firefighters, at One Month following the Carmel Fire Disaster. *Psychiatry Journal*.
- Limosin, F., Loze, J. Y., Cothureau, C., Beaurepaire, C. D., Payan, C., Conso, F., Rouillon, F. (2006). A prospective study of the psychological effects of "person under train" incidents on drivers. *Journal of Psychiatric Research*, 40(8), 755-761.
- Lunt, J. & Hartley R. (2004) Literature Review of Post-Traumatic Stress Disorder Amongst Rail Workers. WPS/04/12. Health and Safety Laboratory.
- Mason, J. (2002). *Qualitative Researching*. London: Sage Publications Ltd.
- McNally, R.J. (2005). *Remembering Trauma*. USA: Harvard University Press
- Mehnert, A., Nanninga, I., Fauth, M., & Schaefer, I. (2012). Course and predictors of posttraumatic stress among male train drivers after the experience of 'person under the train' incidents. *Journal of Psychosomatic Research*, 73(3), 191-196.
- Meyer, E. C., Zimering, R., Daly, E., Knight, J., Kamholz, B. W., & Gulliver, S. B. (2012). Predictors of posttraumatic stress disorder and other psychological symptoms in trauma-exposed firefighters. *Psychological Services*, 9(1), 1-15.
- Moes, A. J. (1997). *Elaboration and Content Analysis of Conceptual Structure in Posttraumatic Stress Disorder*. Unpublished Doctoral Dissertation, University of North Texas, Denton.

- NICE (2005). *Post-traumatic Stress Disorder: The management of PTSD in adults and children in primary and secondary care*. Retrieved from <http://www.nice.org.uk/CG26>
- Orcutt, H. K., Pickett, S. M., & Pope, E. B. (2005). Experiential avoidance and forgiveness as mediators in the relation between traumatic interpersonal events and posttraumatic stress disorder symptoms. *Journal of Social and Clinical Psychology, 24*(7), 1003-1029.
- Orth, U., & Wieland, E. (2006). Anger, hostility, and posttraumatic stress disorder in trauma-exposed adults: A meta-analysis. *Journal of Consulting and Clinical Psychology, 74*(4), 698.
- Ozer, E. J., Best, S. R., Lipsey, T. L., & Weiss, D. S. (2003). Predictors of posttraumatic stress disorder and symptoms in adults: A meta-analysis. *Psychological Bulletin, 129*(1), 52-73.
- Ozer, E. J., Best, S. R., Lipsey, T. L., & Weiss, D. S. (2008). Predictors of posttraumatic stress disorder and symptoms in adults: A meta-analysis. *Psychological Trauma: Theory, Research, Practice, and Policy, 5*(1), 3-36.
- Payne, M. (2006). *Narrative Therapy (2<sup>nd</sup> ed.): An Introduction for Counsellors*. London: Sage Publications Ltd.
- Perrin, M. P. H. M., DiGrande, D. P. H. M. P. H. L., Wheeler, M. P. H. K., Thorpe, P. D. L., Farfel, S. D. M., & Brackbill, P. D. M. P. H. R. (2007). Differences in PTSD Prevalence and Associated Risk Factors Among World Trade Center Disaster Rescue and Recovery Workers. *American Journal of Psychiatry, 164*(9), 1385-1394.
- Power, M. & Dalgleish, T. (1997). *Cognition and Emotion: From Order to Disorder*. England: The Psychology Press.
- Prinz, J. (2006). The emotional basis of moral judgments. *Philosophical Explorations, 9*(1), 29-43.
- Rail Safety and Standards Board. (2012). *Research Brief: Improving suicide prevention measures on the rail network in Great Britain*. RSSB. Retrieved from

[http://www.rssb.co.uk/sitecollectiondocuments/pdf/reports/research/T845\\_rb\\_final.pdf](http://www.rssb.co.uk/sitecollectiondocuments/pdf/reports/research/T845_rb_final.pdf)

f

Rassool, S.B. & Nel, P.W. (2012). Experiences of Causing an Accidental Death: An Interpretative Phenomenological Analysis Study. *Death Studies*, 36 (9), 832-857.

Robison, M. (2012). *On Track with Diversity*. London: ASLEF. Retrieved from [www.aslef.org.uk/files/132894/.../IER-ASLEFDiversityReportproof5.pdf](http://www.aslef.org.uk/files/132894/.../IER-ASLEFDiversityReportproof5.pdf).

Rothschild, B. (2000). *The Body Remembers: The Psychophysiology of Trauma and Trauma Treatment*. London: W.W. Norton & Company Ltd.

Ringel S. (2011). Psychoanalytic Theory (Part II). In S. Ringel & J. Brandell (Eds.), *Trauma: Contemporary directions in theory, practice, and research* (pp. 62-77). Thousand Oaks, CA: SAGE Publications.

Sato R Fau - Kawanishi, C., Kawanishi C Fau - Yamada, T., Yamada T Fau - Hasegawa, H., Hasegawa H Fau - Ikeda, H., Ikeda H Fau - Kato, D., Kato D Fau - Furuno, T., Hirayasu, Y. (2006). *Knowledge and attitude towards suicide among medical students in Japan: preliminary study*. (1323-1316 (Print)).

Samaritans. (2013). *Samaritans and Network Rail*. Retrieved from <http://www.samaritans.org/your-community/reducing-railway-deaths-0/samaritans-and-network-rail-partnership>.

Sermpezis, C. & Winter, D.A. (2009). Is Trauma the Product of Over- or Under-Elaboration? A Critique of the Personal Construct Model of Posttraumatic Stress Disorder. *Journal of Constructivist Psychology*, 22(4), 306-327.

Sewell, K.W. & Cromwell, R.L. (1990). *A Personal Constructs Model of Post-Traumatic Stress Disorder*. Paper presented at the North American Personal Construct Psychology Conference, San Antonio, Texas.

Sewell, K. W. (1996). Constructional Risk Factors for a Post-traumatic Stress Response after a Mass Murder. *Journal of Constructivist Psychology*, 9, 97-107.

- Sewell, K. W., Cromwell, R.L., Farrell-Higgins, J., Palmer, R., Ohlde, C., & Patterson, T.W. (1996). Hierarchical Elaboration in the Conceptual Structures of Vietnam Combat Veterans. *Journal of Constructivist Psychology*, 9, 79-96.
- Sewell, K.W. & Williams, A.M. (2002). Broken Narratives: Trauma, Metaconstructive Gaps, and the Audience of Psychotherapy. *Journal of Constructivist Psychology*, 15, 205-218.
- Sewell, K.W. (2003). An Approach to Post-Traumatic Stress. In F. Fransella (Ed.), *Personal Construct Psychology*. England, Sussex: John Wiley & Sons Ltd.
- Siol, T., Schaefer, A., Thomas, W., & Köhle, K. (2003). Posttraumatic Stress Symptoms in Train Drivers Following Serious Accidents: A Pilot Study. *European Psychotherapy*, 4, 3-9.
- Slater, P. (1977). The Measurement of Intrapersonal Space by Grid Technique. *Volume 2. Dimensions of Intrapersonal Space*. London: John Wiley & Sons Ltd.
- Sporle, T., Winter, D., & Rhodes, J. (2011): Childhood Sexual Abuse and Construction of Self and Others in People Who have Experienced Psychosis. *Journal of Constructivist Psychology*, 24(3), 185-207.
- Sundin, E. C., & Horowitz, M. J. (2003). Horowitz's Impact of Event Scale Evaluation of 20 Years of Use. *Psychosomatic Medicine*, 65(5), 870-876.
- Tranah, T., & Farmer, R. D. T. (1994). Psychological reactions of drivers to railway suicide. *Social Science & Medicine*, 38(3), 459-469.
- Vatshelle, A., & Moen, B. E. (1997). Serious on-the-track accidents experienced by train drivers: psychological reactions and long-term health effects. *J Psychosom Res*, 42(1), 43-52.
- Warner, C. (2011). *The Possibility of Over the Phone Traumatization: A Repertory Grid Study Investigating Secondary Traumatic Stress in Samaritan Crisis Line Volunteers* (Unpublished doctoral thesis, University of Hertfordshire, Hertfordshire, England). Retrieved from <https://uhra.herts.ac.uk/handle/2299/6401>.

- Webb, M. (2009, July). Railway Train Driver. *Growing Ambitions*. Retrieved from [growingambitions.tes.co.uk/printpdf/2842](http://growingambitions.tes.co.uk/printpdf/2842).
- Weiss, D. S., & Marmar, C. R. (1997). The Impact of Event Scale—Revised. In J. P. Wilson, & T. M. Keane (Eds.), *Assessing psychological trauma and PTSD: A handbook for practitioners* (pp. 399–411). New York: Guilford Press.
- Weiss, D.S. (2004). The Impact of Event Scale-Revised. In J.P. Wilson, & T.M. Keane (Eds.), *Assessing psychological trauma and PTSD: A practitioner's handbook* (2nd ed., pp. 168-189). New York: Guilford Press.
- Weiss, K. J., & Farrell, J. M. (2006). PTSD in railroad drivers under the Federal Employers' Liability Act. *Journal of the American Academy of Psychiatry and the Law*, 34(2).
- Winter, D. A. (1983). Logical inconsistency in construct relationships: Conflict or complexity?. *British Journal of Medical Psychology*, 56(1), 79-87
- Winter, D.A. (1992). *Personal Construct Psychology in Clinical Practice: Theory, Research and Applications*. London: Routledge.
- Winter, D.A. & Gould, C. (2000). Construing the Unthinkable. In J.M. Fisher and N. Cornelius (Ed.), *Challenging the Boundaries: PCP Perspectives for the New Millennium* (pp. 258-273). Farnborough, UK: EPCA Publications.
- Yum, B. S., Roh, J. H., Ryu, J. C., Won, J. U., Kim, C. N., Lee, J. E., & Kim, K. Y. (2006). Symptoms of PTSD according to individual and work environment characteristics of Korean railroad drivers with experience of person-under-train accidents. *Journal of Psychosomatic Research*, 61(5).

University of Hertfordshire  
**Doctorate in Clinical Psychology**

**PARTICIPANT INFORMATION SHEET (Repertory Grid and Questionnaires)**

**Research Title:** Train Drivers’ Experiences of Railway Suicides: A Repertory Grid Study.

**Introduction:** You are invited to take part in a research study exploring the experiences of train drivers who have been involved in railway suicides. Before you decide whether you would like to give consent to take part, please take the time to read the following information, which I have written to help you understand why the research is being carried out and what it will involve.

**The Researchers:** The study is being carried out by Rebecca Connabeer, Trainee Clinical Psychologist, as part of a Doctoral qualification in Clinical Psychology. The study is supervised by Professor David Winter, Course Director, Chartered Clinical Psychologist and Personal Construct Psychotherapist.

**Aim of the study:**

The aim of this research is to find out about people’s experiences of being the driver of a train involved in a railway suicide. Every year in Britain there are approximately 200 railway suicides on the National Rail network and 50 on the London Underground (Webb, 2005). These statistics make it highly likely that a train driver will witness at least one railway suicide in their career.

There have been a number of research studies, mainly using survey and questionnaire methods to investigate the physical and psychological effects of these incidents on drivers. However, there is very little academic literature or research providing an in-depth investigation of such incidents from the drivers’ perspective.

This research hopes to address this by giving a voice to those drivers who have witnessed a railway suicide.

**What is involved?**

If you decide that you would like to take part, you will be asked to sign a consent form and complete a brief questionnaire about yourself, this will include providing some information about the incident.

You will also be invited to complete a ‘repertory grid’, which will be used to gain an understanding of the links between the ways that you view yourself and other people, and how this has been influenced by the incident.

The repertory grid procedure is like a structured interview, which will involve asking you questions about yourself and other important people in your life. I will be trying to understand you from your perspective. There are no right or wrong answers.

I will also ask you to complete a questionnaire called an Impact of Event Scale, which contains a list of difficulties people often experience after a stressful event, and asks which, if any, you experienced after witnessing the railway suicide.

The whole meeting should take no longer than 1.5 hours, and can be conducted at a location convenient to you.

As a second part of the research, one individual will be invited to discuss with me their answers on the repertory grid, and to talk in greater depth about their experience of witnessing a railway suicide. If you are invited to take part I will provide you with more details when we meet. However, you can choose just to do the first part of the research and not meet again, if you wish.

**What are the potential risks of taking part?**

I am aware from my clinical experience of working with distress and trauma that this topic can be very emotive, and that it may cause some discomfort and distress. If this does occur you can take a break, and you can also stop the interview at any time. Despite these potential difficulties, some researchers suggest that people taking part in research can find the process therapeutic and beneficial. You will be given a number of contact details following the study, should you feel that you require support.

**What are the benefits of taking part?**

By taking part you will help us to enhance our understanding of how people experience and are affected by distressing experiences, and how this understanding may be used to help treat people who are severely affected by these experiences.

You will be contributing to what is thought to be the first study to use this methodology to investigate train drivers' experiences of witnessing a railway suicide.

It is hoped that the results of this study may guide the policies and working practices of train companies whose drivers are witness to a railway suicide.

**Voluntary participation**

The participation in this research is entirely voluntary, and you may withdraw at any time, without giving a reason, and without any negative effect on your employment.

**Confidentiality**

All the information about your participation, and any information collected about you during the course of the research, will be kept strictly confidential.

**What will happen to the results of this study?**

The results will be written up as a thesis for the requirements of the University of Hertfordshire's Doctorate in Clinical Psychology. No participants will be identifiable in written or published material.

**Who has reviewed this study?**

The project has been approved by the Psychology Ethics Committee at the University of Hertfordshire (protocol number PSY/08/12/RC).

**Thank you for taking the time to read this information, and for considering taking part in this study.**

University of Hertfordshire  
**Doctorate in Clinical Psychology**

PARTICIPANT INFORMATION SHEET (Semi-Structured Interview)

**Research Title:** Train Drivers' Experiences of Railway Suicides: A Repertory Grid Study.

**Introduction:**

You are invited to take part in a research study exploring the experiences of train drivers' who have been involved in railway suicides. You will have already completed the first part of the study, which comprised the completion of questionnaires and a repertory grid. You are now being asked to complete the second part of the study, which comprises a semi-structured interview. Before you decide whether you would like to give consent to take part, please take the time to read the following information, which I have written to help you understand why the research is being carried out and what it will involve.

**The researchers:**

The study is being carried out by Rebecca Connabeer, Trainee Clinical Psychologist, as part of a Doctoral qualification in Clinical Psychology. The study is supervised by Professor David Winter, Course Director, Chartered Clinical Psychologist and Personal Construct Psychotherapist.

**Aim of the study:**

The aim of this research is to find out about peoples experiences of being the driver of a train involved in a railway suicide. Every year in Britain there are approximately 200 railway suicides on the National Rail network and 50 on the London Underground (Webb, 2005). These statistics make it highly likely that a train driver will witness at least one railway suicide in their career.

There have been a number of research studies, mainly using survey and questionnaire methods to investigate the physical and psychological effects of these incidents on drivers'. However, there is very little academic literature or research providing an in-depth investigation of such incidents from the drivers' perspective.

This research hopes to address this by giving drivers who have witnessed a railway suicide a chance to talk about their experiences.

**What is involved?**

If you decide that you would like to take part, you will be asked to sign a consent form and then invited to take part in a semi-structured interview. This will involve looking at and discussing the results of the analysis of your repertory grid, as well as answering some more general questions about your experience of witnessing the railway suicide. The purpose is to gain more in-depth information about your experience and how this relates to how you completed their repertory grid.

This interview will be tape recorded and later transcribed verbatim, after which the tape will be wiped.

The whole interview should take no longer than 1.5 hours, and can be conducted at a location convenient to you.

**Why have I been selected?**

You were chosen for two main reasons; firstly because you indicated you were happy to be contacted for the second part of the study, and secondly because your responses during the first part of the research highlighted that you fulfilled the criteria to complete the semi-structured interview.

**What are the potential risks of taking part?**

I am aware from my clinical experience of working with distress and trauma that this topic can be very emotive, and that it may cause some discomfort and distress. If this does occur you can take a break, and you can also stop the interview at any time. Despite these potential difficulties, some researchers suggest that people taking part in research can find the process therapeutic and beneficial. You will be given a number of contact details following the study, should you feel that you require support.

**What are the benefits of taking part?**

By taking part you will help us to enhance our understanding of how people experience and are affected by distressing experiences, and how this understanding may be used to help treat people who are severely affected by these experiences.

You will be contributing to what is thought to be the first study to use this methodology to investigate train drivers' experiences of witnessing a railway suicide.

It is hoped that the results of this study may guide the policies and working practices of train companies whose drivers are witness to a railway suicide.

**Voluntary participation**

The participation in this research is entirely voluntary, and you may withdraw at any time, without giving a reason, and without any negative effect on your employment.

**Confidentiality**

All the information about your participation, and any information collected about you during the course of the research, will be kept strictly confidential.

**What will happen to the results of this study?**

The results will be written up as a thesis for the requirements of the University of Hertfordshire's Doctorate in Clinical Psychology. No participants will be identifiable in written or published material.

**Who has reviewed this study?**

The project has been approved by the Psychology Ethics Committee at the University of Hertfordshire (protocol number PSY/08/12/RC).

**Thank you for taking the time to read this information, and for considering taking part in this study.**



University of Hertfordshire  
**Doctorate in Clinical Psychology**

**PARTICIPANT CONSENT FORM (Questionnaires and Repertory Grid)**

**Project Title:** Train Drivers’ Experiences of Railway Suicides: A Repertory Grid Study.

**Researcher:** Rebecca Connabeer, Trainee Clinical Psychologist

**Please tick:**

- 1) I confirm that I have read and understand the information sheet dated ( ) for the above study. I have had the opportunity to consider the information and if needed ask questions that were satisfactorily answered.
- 2) I agree to being contacted to take part in the second part of the study, to complete a semi-structured interview, should I be selected.
- 3) I understand that my participation is voluntary, that I am free to withdraw at any time, without giving any reason, and that this will not have any negative effect on my employment with ( ).
- 4) I understand that my information will be filed in a locked cabinet and that the information I provide will be anonymised for the use of the study.
- 5) I agree that research data gathered for the study may be published, provided that I cannot be identified.
- 6) Contact information has been provided should I wish to seek further information from the investigator at any time for purposes of clarification.

Participant’s Name .....

Participant’s Signature ..... Date .....

**Statement by Researcher**

- I have explained this project and the implications of participation in it to this participant without bias and I believe that the consent is informed and that he/she understands the implications of participation.

Researcher’s Name .....

Researcher’s Signature ..... Date .....

ETHICS PROTOCOL NUMBER: PSY/08/12/RC



### **PARTICIPANT DEBRIEFING SHEET (Repertory Grid and Questionnaires)**

Research Title: Train Drivers' Experiences of Railway Suicides: A Repertory Grid Study

Thank you for taking the time to complete this study. The purpose of this study was to add to the very limited body of research investigating the impact of railway suicides on train drivers. The study also hoped to add to our understanding of distressing experiences and the resulting effects. Furthermore, it was hoped that the result may be useful to train companies in their planning of support for drivers who have experienced such incidents.

The main aims of this study were to:

- Assess the psychological impact of the railway suicide on train drivers.
- Assess the impact individual and contextual factors, such as age and whether the incident occurred in the dark, have on the level of impact of the incident psychologically.
- Explore the way train drivers who have witnessed a railway suicide view themselves and others both before and after the incident took place and what, if any, relationship this has to the level of psychological distress, related to the incident, they experience.

In this research a poster was displayed in your place of work, or you were approached directly by your manager. Details of the research and contact details of the researcher were provided, and you were then asked to contact the researcher directly if interested in taking part. You were then asked to complete a consent form. After giving your consent you completed a questionnaire asking for basic background information (such as age and whether the incident occurred in the dark), an Impact of Event Scale, looking at the level of distress you experienced after witnessing the railway suicide, and a repertory grid, looking at how you viewed yourself and others, both before and after the incident took place.

Unfortunately, although you have answered a number of questions, I cannot give you feedback on your individual scores, or on your repertory grid.

However, if you would like to receive a copy of a report which will summarise my findings, please leave your contact information with the researcher, Rebecca Connabeer.

You have been asked to make up a code which is unique to you, which can be given to me if you would like your data to be withdrawn from the study (and subsequently destroyed), up until it is submitted as a doctoral thesis.

If you have any further questions or concerns please feel free to contact me at [rebecca.connabeer@btinternet.com](mailto:rebecca.connabeer@btinternet.com) for more information.

You can also contact Professor David Winter at [d.winter@herts.ac.uk](mailto:d.winter@herts.ac.uk), Chartered Clinical Psychologist, Personal Construct Psychotherapist and Course Director, Doctorate of Clinical Psychology, University of Hertfordshire or Dr Barbara Mason at [b.l.mason@herts.ac.uk](mailto:b.l.mason@herts.ac.uk),

Chartered Clinical Psychologist and Clinical Tutor, Doctorate of Clinical Psychology,  
University of Hertfordshire.

How do you feel now? Whilst everyone feels low in mood or anxious from time to time, if you have been feeling like this for some time and it is affecting your ability to cope with day to day life, you should contact your GP or manager and/or seek advice from a professional organisation. Additionally, it is possible that by participating in this study, you may be feeling some distress. If you would like to talk to someone about these feelings, again you are invited to contact the organisations listed in the leaflet given to all participants of this study, contact your manager and/or visit your GP.

*Thank you very much for your participation in this study.*

ETHICS PROTOCOL NUMBER: PSY/08/12/RC

University of Hertfordshire  
**Doctorate in Clinical Psychology**

**PARTICIPANT DEBRIEFING SHEET (Semi-Structured Interview)**

You have completed two parts of the study; questionnaires and a repertory grid, and a semi-structured interview.

The purpose of this study was to add to the very limited body of research investigating the impact of railway suicides on train drivers. The study also hoped to add to our understanding of trauma and the resulting effects. Furthermore, it was hoped that the result may be useful to train companies in their planning of support for drivers who have experienced such incidents.

The main aim of the semi-structured interview was to further explore one driver's experience of witnessing a railway suicide, to think about and discuss with the researcher the results of their repertory grid and how the results relate to the driver's overall experience. For the purposes of this research introducing an additional method of data collection was thought to be very valuable in such an under-investigated area.

Unfortunately, I cannot give you feedback on your interview.

However, if you would like to receive a copy of a report which will summarise my findings, please leave your contact information with the researcher, Rebecca Connabeer.

You have been asked to make up a code which is unique to you, which can be given to me if you would like your data to be withdrawn from the study (and subsequently destroyed), up until it is submitted as a doctoral thesis.

If you have any further questions or concerns please feel free to contact me at [rebecca.connabeer@btinternet.com](mailto:rebecca.connabeer@btinternet.com) for more information.

You can also contact Professor David Winter at [d.winter@herts.ac.uk](mailto:d.winter@herts.ac.uk), Chartered Clinical Psychologist, Personal Construct Psychotherapist and Course Director, Doctorate of Clinical Psychology, University of Hertfordshire or Dr Barbara Mason at [b.l.mason@herts.ac.uk](mailto:b.l.mason@herts.ac.uk), Chartered Clinical Psychologist and Clinical Tutor, Doctorate of Clinical Psychology, University of Hertfordshire.

How do you feel now? Whilst everyone feels low in mood or anxious from time to time, if you have been feeling like this for some time and it is affecting your ability to cope with day to day life, you should contact your GP or manager and/or seek advice from a professional organisation. Additionally, it is possible that by participating in this study, you may be feeling some distress. If you would like to talk to someone about these feelings, again you are invited to contact the organisations listed in the leaflet given to all participants of this study, contact your manager and/or visit your GP.

*Thank you very much for your participation in this study.*

ETHICS PROTOCOL NUMBER: PSY/08/12/RC

**INFORMATION LEAFLET  
ON SUPPORT AVAILABLE IF YOU FEEL DEPRESSED**

Everyone may feel depressed or anxious. These emotions are natural reactions to disappointment or apprehension. However, if you think your mood has been low for some time and is affecting your ability to cope with day-to-day life, you should contact your GP or counselling services and/or seek help and advice from professional organisations. Some of these organisations are listed below:

**MIND**

**Leading mental health charity in England and Wales. The MindInfoLine offers thousands of callers confidential help on a range of mental health issues.**

15-19 Broadway, London E15 4BQ  
Tel. 0845 766 0163; website: [www.mind.org.uk](http://www.mind.org.uk)

**MENTAL HEALTH FOUNDATION**

**Independent organisation that helps people to survive, recover from and prevent mental health problems**

9th floor, Sea Containers House, 20 Upper Ground, London SE19QB  
Tel. 020 78031100; website: [www.mentalhealth.org.uk](http://www.mentalhealth.org.uk)  
This is the biggest website on mental health (and mental illness) in the UK.

**Samaritans**

**National organisation offering support to those in distress who feel suicidal or despairing and need someone to talk to.**

The telephone number of your local branch can be found in the telephone directory. The 24-hour Helpline: 08457 90 90 90; website: [www.samaritans.org.uk](http://www.samaritans.org.uk)

**Depression Alliance**

**Information, support and understanding for people who suffer with depression and for relatives who want to help.**

35 Westminster Bridge Road, London SE1 7JB  
Tel: 0845 123 23 20; website: [www.depressionalliance.org/](http://www.depressionalliance.org/)

**Fellowship of Depressives Anonymous**

**A national mutual support group for people suffering from Depression**

Box FDA, Self-Help Nottingham, Ormiston House, 32-36 Pelham Street, Nottingham NG1 2EG  
Tel: 0870 774 4320; website: [www.depressionanon.co.uk](http://www.depressionanon.co.uk)

**RELATE**

**UK's largest and most experienced relationship counselling organisation**

Herbert Gray College, Little Church Street, Rugby CV21 3AP  
Tel: 0845 456 1310; website: [www.relate.org.uk](http://www.relate.org.uk)

ETHICS PROTOCOL NUMBER: PSY/08/12/RC

Are you  
a driver who  
has witnessed  
a railway suicide  
whilst driving?



My name is Rebecca Connabeer and I am a Trainee Clinical Psychologist.

I would like to invite you to take part in a research project.

The research aims to investigate the experiences of train drivers who have witnessed a railway suicide.

Research into the impact of railway suicides from the perspective of the train driver themselves is very limited. Your participation would therefore be a valuable contribution to expanding our understanding in this area.

I can meet you at a location that is convenient to you, and the research will not take up too much of your time.

ETHICS PROTOCOL NUMBER: PSY/08/12/RC

For more information  
please e-mail me at  
[rebecca.connabeer@btinternet.com](mailto:rebecca.connabeer@btinternet.com) or call me on  
07944009305.

APPENDIX 6 – Ethical Approval

Original and Post Modification

**IMPACT OF EVENT SCALE- REVISED**

**INSTRUCTIONS:** Below is a list of difficulties people sometimes have after stressful life events. Please read each item, and then indicate how distressing each difficulty has been for you **DURING THE PAST SEVEN DAYS** with respect to \_\_\_\_\_, which occurred on \_\_\_\_\_. How much were you distressed or bothered by these difficulties?

Not at all = 0	A little bit = 1	Moderately = 2	Quite a bit = 3	Extremely = 4
----------------	------------------	----------------	-----------------	---------------

1. Any reminder brought back feelings about it.
2. I had trouble staying asleep.
3. Other things kept making me think about it.
4. I felt irritable and angry.
5. I avoided letting myself get upset when I thought about it or was reminded of it.
6. I thought about it when I didn't mean to.
7. I felt as if it hadn't happened or wasn't real.
8. I stayed away from reminders of it.
9. Pictures about it popped into my mind.
10. I was jumpy and easily startled.
11. I tried not to think about it.
12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.
13. My feelings about it were kind of numb.
14. I found myself acting or feeling like I was back at that time.
15. I had trouble falling asleep.
16. I had waves of strong feelings about it.
17. I tried to remove it from my memory.
18. I had trouble concentrating.
19. Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart.
20. I had dreams about it.
21. I felt watchful and on-guard.
22. I tried not to talk about it.

The **Intrusion** subscale is the **MEAN** item response of items **1, 2, 3, 6, 9, 14, 16, 20**. Thus, scores can range from 0 through 4.

The **Avoidance** subscale is the **MEAN** item response of items **5, 7, 8, 11, 12, 13, 17, 22**. Thus, scores can range from 0 through 4.

The **Hyperarousal** subscale is the **MEAN** item response of items **4, 10, 15, 18, 19, 21**. Thus, scores can range from 0 through 4.

Citations: Weiss, D.S. & Marmar, C.R. (1997). The Impact of Event Scale-Revised. In J.P. Wilson, & T. M. Keane (Eds.), *Assessing Psychological Trauma and PTSD: A Practitioner's Handbook*. (pp. 399-411). New York: Guilford.

Weiss, D. S. (2004). The Impact of Event Scale-Revised. In J. P. Wilson, & T. M. Keane (Eds.), *Assessing psychological trauma and PTSD: A practitioner's handbook* (2<sup>nd</sup> ed., pp. 168-189). New York: Guilford Press.

University of Hertfordshire  
**Doctorate in Clinical Psychology: REPERTORY GRID**

	CURRENT SELF	SELF BEFORE THE INCIDENT	IDEAL SELF	PARTNER OR PERSON WHO MOST CLOSELY FITS THIS DESCRIPTION	PERSON I LIKE	PERSON I DISLIKE	SELF WHEN DRIVING TRAIN BEFORE INCIDENT	CURRENT SELF WHEN DRIVING TRAIN	DRIVERS WHO HAVE NOT WITNESSED A RAILWAY SUICIDE	PERSON WHO COMMITTED SUICIDE	6	5	4	3	2	1
	A	B	C	D	E	F	G	H	I	K	Emergent	Implicit				
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11											Traumatized					

UNIQUE IDENTIFIER: \_\_\_\_\_ PROTOCOL NUMBER: PSY/08/12/RC

APPENDIX 9 – Background Information Questionnaire

UNIQUE IDENTIFIER: \_\_\_\_\_

University of Hertfordshire  
**Doctorate in Clinical Psychology**



BACKGROUND INFORMATION QUESTIONNAIRE

*Please feel free to clarify any of your answers in the box provided at the end of the questionnaire.*

1. Do you agree to be contacted to complete the second part of the study, should you be chosen?

Yes [ ] No [ ]

2. What is your gender?

Male [ ] Female [ ]

3. How old are you?

29 years or below [ ]      30-39 years [ ]      40-49 years [ ]  
50-59 years [ ]      60-69 years [ ]      over 70 [ ]

4. What is your ethnicity?

Black African [ ] Indian [ ] White [ ]  
Black Caribbean [ ] Pakistani [ ] Mixed [ ]  
Black other [ ] Bangladeshi [ ] Other [ ]  
Chinese [ ] Asian other [ ]

5. What is your marital status?

Married/Cohabiting [ ] Single [ ] Separated/Divorced [ ]  
Dating [ ] Widowed [ ] Other [ ] \_\_\_\_\_ (please specify)

6. How long have you worked as a train driver?

\_\_\_\_\_

7. How many railway suicides have you witnessed when you have been driving a train?

\_\_\_\_\_

*NOTE: If you have witnessed more than one railway suicide please answer the following questions in relation to the suicide that happened most recently.*

8. When did the suicide occur?

\_\_\_\_\_

9. Did the suicide occur in the dark?

Yes [ ]      No [ ]

10. Approximately how long were you on your own after the incident occurred?

\_\_\_\_\_

11. Were medical tests carried out on you following the incident (e.g. breathalyser)

Yes [ ]      No [ ]

12. Were you interviewed by the British Transport Police (BTP) following the incident?

Yes [ ]      No [ ]

13. Did you attend coroner's court after the incident?

Yes [ ]      No [ ]

14. Did you take time off after the incident?

Yes [ ]      No [ ]

If yes, please specify for how long:

\_\_\_\_\_

15. Did you receive workplace support/counselling?

Yes [ ]      No [ ]

16. Did you experience any stressful life events immediately following the incident? For example, death of a loved one, marriage, moving house, divorce etc.

Yes [ ]      No [ ]

If yes, please specify:

\_\_\_\_\_

17. In the last 5 years, have you been given a diagnosis of Posttraumatic Stress Disorder or thought you might have suffered from it?

Yes [ ]      No [ ]      Do not know [ ]

18. Have you ever had professional psychological support/therapy from a mental health professional (e.g. a counsellor or psychologist) in relation to your emotional reactions following the incident?

Yes [ ]                      No [ ]

19. Do you think that the support systems that your employers have put in place (e.g. supervision, de-briefing) were helpful for helping you to deal with this incident?

Yes [ ]                      No [ ]

If yes, what was most helpful to you?

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If no, what do you think may have been more useful?

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*Please feel free to make any other comments you would like to make concerning your experience of witnessing a railway suicide.*



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## SEMI-STRUCTURED INTERVIEW QUESTIONS

The graph suggests how you see yourself and others both before and after you witnessed the suicide... is this how you would see things? In what ways do you agree/disagree?

### CONSTRUING

- What characteristics describe you before the incident? Personally and Professionally.
- What characteristics describe you now? Personally and Professionally.
- What characteristics describe the person who committed suicide?
- What characteristics describe drivers who have not witnessed a railway suicide?
- Looking at how you construed yourself after the suicide, why do you think you saw yourself this way? Did looking at yourself this way help or hinder you? What do you think would have happened if you looked at yourself differently?
- Looking at how you construed the person who committed suicide? Did looking at them this way help or hinder how you dealt with the incident? What do you think would have happened if you looked at them differently?
- Looking at how you construed yourself as a train driver after the incident, do you think that the incident has changed how you are at work?

### COPING

- What sort of qualities do you think a driver might have that would make it harder to cope with witnessing a railway suicide?
- What qualities do you think are important to have as a train driver?
- What qualities do you think are important for the significant people in your life to have?
- What qualities do you think are important for your employers to have with regards to supporting drivers like yourself after such incidents?

ETHICS PROTOCOL NUMBER: PSY/08/12/RC

1. IES-R Total Score Analysis

**Hypothesis Test Summary**

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between presentscore and pastscore equals 0.	Related-Samples Wilcoxon Signed Rank Test	.001	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .10.

**Test Statistics<sup>b</sup>**

	presentscore - pastscore
Z	-3.408 <sup>a</sup>
Asymp. Sig. (2-tailed)	.001

a. Based on positive ranks.

b. Wilcoxon Signed Ranks Test

2. IES-R Subscale Analysis

**Hypothesis Test Summary**

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between IntrusionP and AvoidanceP equals 0.	Related-Samples Wilcoxon Signed Rank Test	.001	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .01.

**Test Statistics<sup>b</sup>**

	AvoidanceP - IntrusionP	HyperarousalP - IntrusionP	AvoidanceP - HyperarousalP	AvoidanceC - IntrusionC
Z	-3.298 <sup>a</sup>	-3.107 <sup>a</sup>	-1.445 <sup>a</sup>	-1.365 <sup>a</sup>
Asymp. Sig. (2-tailed)	.001	.002	.149	.172

a. Based on positive ranks.

b. Wilcoxon Signed Ranks Test

### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distributions of IntrusionC, AvoidanceC and HyperarousalC are the same.	Related-Samples Friedman's two-Way Analysis of Variance by Ranks	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .10.

### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between IntrusionC and AvoidanceC equals 0.	Related-Samples Wilcoxon Signed Rank Test	.172	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .01.

### 3. Tightness of Construing

#### Correlations

			IESRpresent	%variancePC_1
Spearman's rho	IESRpresent	Correlation Coefficient	1.000	-.386
		Sig. (2-tailed)	.	.156
		N	15	15
	%variancePC_1	Correlation Coefficient	-.386	1.000
		Sig. (2-tailed)	.156	.
		N	15	15

#### Correlations

			%variancePC_1	IESRpast
Spearman's rho	%variancePC_1	Correlation Coefficient	1.000	-.113
		Sig. (2-tailed)	.	.689
		N	15	15
	IESRpast	Correlation Coefficient	-.113	1.000
		Sig. (2-tailed)	.689	.
		N	15	15

#### 4. Extremity of Ratings

**Correlations**

			noofextremerati ngs	presentscore
Spearman's rho	noofextremeratings	Correlation Coefficient	1.000	-.373
		Sig. (2-tailed)	.	.171
		N	15	15
	presentscore	Correlation Coefficient	-.373	1.000
		Sig. (2-tailed)	.171	.
		N	15	15

**Correlations**

			pastscore	noofextremerati ngs
Spearman's rho	pastscore	Correlation Coefficient	1.000	.106
		Sig. (1-tailed)	.	.354
		N	15	15
	noofextremeratings	Correlation Coefficient	.106	1.000
		Sig. (1-tailed)	.354	.
		N	15	15

**Correlations**

			noofextremevictimratings	pastscore
Spearman's rho	noofextremevictimratings	Correlation Coefficient	1.000	-.011
		Sig. (2-tailed)	.	.969
		N	15	15
	pastscore	Correlation Coefficient	-.011	1.000
		Sig. (2-tailed)	.969	.
		N	15	15

**Correlations**

			presentscore	noofextremevictimratings
Spearman's rho	presentscore	Correlation Coefficient	1.000	-.083
		Sig. (2-tailed)	.	.768
		N	15	15
	noofextremevictimratings	Correlation Coefficient	-.083	1.000
		Sig. (2-tailed)	.768	.
		N	15	15

5. Superordinacy

**Correlations**

			pastscore	percentagesumsquares
Spearman's rho	pastscore	Correlation Coefficient	1.000	-.519*
		Sig. (2-tailed)	.	.048
		N	15	15
	percentagesumsquares	Correlation Coefficient	-.519*	1.000
		Sig. (2-tailed)	.048	.
		N	15	15

\*. Correlation is significant at the 0.05 level (2-tailed).

**Correlations**

			percentagesumsquares	presentscore
Spearman's rho	percentagesumsquares	Correlation Coefficient	1.000	-.539*
		Sig. (2-tailed)	.	.038
		N	15	15
	presentscore	Correlation Coefficient	-.539*	1.000
		Sig. (2-tailed)	.038	.
		N	15	15

\*. Correlation is significant at the 0.05 level (2-tailed).

## 6. Conflict

**Correlations**

		conflictselfafter	pastIESR
Spearman's rho	Correlation Coefficient	1.000	.086
	conflictselfafter Sig. (1-tailed)	.	.380
	N	15	15
	Correlation Coefficient	.086	1.000
	pastIESR Sig. (1-tailed)	.380	.
	N	15	15

**Correlations**

		conflictselfafter	presentIESR
Spearman's rho	Correlation Coefficient	1.000	.000
	conflictselfafter Sig. (1-tailed)	.	.500
	N	15	15
	Correlation Coefficient	.000	1.000
	presentIESR Sig. (1-tailed)	.500	.
	N	15	15

**Correlations**

		presentIESR	conflictvictim
Spearman's rho	Correlation Coefficient	1.000	.079
	presentIESR Sig. (1-tailed)	.	.390
	N	15	15
	Correlation Coefficient	.079	1.000
	conflictvictim Sig. (1-tailed)	.390	.
	N	15	15

**Correlations**

		conflictictim	pastIESR
Spearman's rho	Correlation Coefficient	1.000	-.360
	conflictictim Sig. (2-tailed)	.	.188
	N	15	15
	Correlation Coefficient	-.360	1.000
	pastIESR Sig. (2-tailed)	.188	.
	N	15	15

7. Elaboration

**Correlations**

		elaborationselfnow	pastscore
Spearman's rho	Correlation Coefficient	1.000	-.139
	elaborationselfnow Sig. (1-tailed)	.	.311
	N	15	15
	Correlation Coefficient	-.139	1.000
	pastscore Sig. (1-tailed)	.311	.
	N	15	15

**Correlations**

		elaborationselfnow	presentscore
Spearman's rho	Correlation Coefficient	1.000	-.208
	elaborationselfnow Sig. (1-tailed)	.	.228
	N	15	15
	Correlation Coefficient	-.208	1.000
	presentscore Sig. (1-tailed)	.228	.
	N	15	15

## 8. Dissimilarity in Euclidean Distances

**Correlations**

		selfbeforeevents elfaftereventdist ance	pastscore	
Spearman's rho	Correlation Coefficient	1.000	.251	
	selfbeforeeventselfaftereventdistance	Sig. (1-tailed)	.	
		N	15	
	pastscore	Correlation Coefficient	.251	1.000
		Sig. (1-tailed)	.184	.
		N	15	15

**Correlations**

		pastscore	selfafteridealsel fdistance	
Spearman's rho	Correlation Coefficient	1.000	.197	
	pastscore	Sig. (1-tailed)	.	
		N	15	
	selfafteridealsel fdistance	Correlation Coefficient	.197	1.000
		Sig. (1-tailed)	.241	.
		N	15	15

**Correlations**

		presentscore	selfafteridealsel fdistance	
Spearman's rho	Correlation Coefficient	1.000	.471*	
	presentscore	Sig. (1-tailed)	.	
		N	15	
	selfafteridealsel fdistance	Correlation Coefficient	.471*	1.000
		Sig. (1-tailed)	.038	.
		N	15	15

\*. Correlation is significant at the 0.05 level (1-tailed).

**Correlations**

		presentscore	selfafterotherdriversdistance
Spearman's rho	presentscore	Correlation Coefficient	1.000
		Sig. (1-tailed)	.
		N	15
	selfafterotherdriversdistance	Correlation Coefficient	.372
		Sig. (1-tailed)	.086
		N	15

**Correlations**

		selfafterotherdriversdistance	pastscore
Spearman's rho	selfafterotherdriversdistance	Correlation Coefficient	1.000
		Sig. (1-tailed)	.
		N	15
	pastscore	Correlation Coefficient	.173
		Sig. (1-tailed)	.269
		N	15

**Correlations**

		presentscore	selfaftervictimdistance
Spearman's rho	presentscore	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	14
	selfaftervictimdistance	Correlation Coefficient	-.359
		Sig. (2-tailed)	.208
		N	14

**Correlations**

		selfaftervictimdis		
		tance	pastscore	
Spearman's rho	selfaftervictimdistance	Correlation Coefficient	1.000	-.381
		Sig. (2-tailed)	.	.178
		N	14	14
	pastscore	Correlation Coefficient	-.381	1.000
		Sig. (2-tailed)	.178	.
		N	14	14

9. Content Analysis

**Correlations**

		IESRpast	moralconstructsvictim	
Spearman's rho	IESRpast	Correlation Coefficient	1.000	.249
		Sig. (1-tailed)	.	.186
		N	15	15
	moralconstructsvictim	Correlation Coefficient	.249	1.000
		Sig. (1-tailed)	.186	.
		N	15	15

**Correlations**

		moralconstructsvictim	IESRpresent	
Spearman's rho	moralconstructsvictim	Correlation Coefficient	1.000	.553*
		Sig. (1-tailed)	.	.016
		N	15	15
	IESRpresent	Correlation Coefficient	.553*	1.000
		Sig. (1-tailed)	.016	.
		N	15	15

\*. Correlation is significant at the 0.05 level (1-tailed).

**Correlations**

		moralconstructs	IESRpast
Spearman's rho	Correlation Coefficient	1.000	.410
	moralconstructs Sig. (1-tailed)	.	.064
	N	15	15
	Correlation Coefficient	.410	1.000
	IESRpast Sig. (1-tailed)	.064	.
	N	15	15

**Correlations**

		IESRpresent	moralconstructs
Spearman's rho	Correlation Coefficient	1.000	.629**
	IESRpresent Sig. (1-tailed)	.	.006
	N	15	15
	Correlation Coefficient	.629**	1.000
	moralconstructs Sig. (1-tailed)	.006	.
	N	15	15

\*\* . Correlation is significant at the 0.01 level (1-tailed).

**Correlations**

		emotionalconstr ucts	IESRpresent
Spearman's rho	Correlation Coefficient	1.000	-.751**
	emotionalconstructs Sig. (1-tailed)	.	.001
	N	15	15
	Correlation Coefficient	-.751**	1.000
	IESRpresent Sig. (1-tailed)	.001	.
	N	15	15

\*\* . Correlation is significant at the 0.01 level (1-tailed).

**Correlations**

		IESRpast	emotionalconstr ucts
Spearman's rho	IESRpast		
	Correlation Coefficient	1.000	-.320
	Sig. (1-tailed)	.	.122
	N	15	15
	emotionalconstructs		
	Correlation Coefficient	-.320	1.000
	Sig. (1-tailed)	.122	.
	N	15	15



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Interviewer: First of all I'll just explain that I have done part of the analysis of what we did together the first time we met. So this is part of what it looks like. I know it looks very complicated.

Respondent: I'm sure it means something to you.

Interviewer: It's just a graph really, plotting the different people that we talked about and some of the words that you used to describe them.

Respondent: So this is my personal illustration, is it?

Interviewer: Yes. So what I'll do now is talk through some of this with you and see if you would say that you would agree or where you agree, where you disagree with what some of this suggests.

Respondent: Okay.

Interviewer: So in each of these squares, if you like, is the different people. And what your graph suggests is that you when driving a train before and you as a person before the incident is somewhat different to you now and you driving a train now.

Respondent: I'll agree with that, yeah.

Interviewer: Because they're further apart. So that's something that you feel you would agree with?

Respondent: Yeah.

Interviewer: And it also suggests that you before and drivers who had not witnessed a railway suicide are somewhat more similar.

Respondent: Right.

Interviewer: Which you would kind of expect.

Respondent: Yeah.

Interviewer: Because before you had an incident you were –

Respondent: Yeah, I was a driver. Yeah.

Interviewer: Yeah. So that kind of makes sense as well. So if we start with the differences between you driving a train before and you driving a train now and you as a person now, this would suggest that before the event these words were the way that you saw yourself. So before it happened you saw yourself as somebody who was unprepared, more vulnerable, blissfully ignorant and someone who gets cross more easily. Not very close to that but the graph does suggest that before the incident you saw yourself as someone who gets cross more easily. So what would you think about that, that it says before it suggests that you saw yourself as unprepared and vulnerable?

Respondent: In terms of the incident itself that's how I would perceive myself to have been prior to the incident, because as we discussed earlier you know that it's

something that could happen with 200 plus a year happening you know it's something that could happen, so you are sort of prepared but you never know how you're going to be affected on the given day. So in that regard I would say I was unprepared because I remember saying that the way it affected me was different to how I perceived it would affect me. I thought that guilt would never be an issue, which it wasn't. I thought that blame and attributing blame to myself or others would never happen and it didn't, but that sort of blindsided me to some degree in the ways it's affected me in a more intimate way, you know? And I think the fact that I left myself open to that, sort of pigeon holing how I thought I would feel and how I thought it would affect me sort of left me very much exposed because I didn't have any armour I suppose for lack of a better word to the things that has happened, if that makes sense. My armour was all for what I thought was going to come and I've sort of been hit from the back if you see what I mean.

Interviewer: So are you saying that seeing yourself before, you see yourself as vulnerable because you had a preconceived idea of what it would be like and how you would be affected?

Respondent: Yes.

Interviewer: And that left you like you said closed off to thinking about.

Respondent: Exposed, yeah, obviously you've got an idea in your head of what it happens it's a peril of the job and I'm going to deal with it this way, and when it actually happens you find that that's not the way you deal with it at all and it affects you in ways you never even imagined, like on a personal side and social side, on a relationship side, all those sort of things that you thought wouldn't have a factor in it, do, and I didn't anticipate that I suppose, not that you can really anticipate anything like that but when you're in an industry where it is prone to happen you do find yourself braced to some extent but, like I say, not fully.

Interviewer: Where do you think the ideas of how you thought it would be came from?

Respondent: I don't know, I think it came from an idea of when I first joined the railway, you were always told when you were in training that it is a risk, it is a peril of the job, and I don't know, myself personally I always take the boy scout attitude of always be prepared, and I just thought to myself I'm going to decide, foolishly in hindsight, how I was going to deal with the incident should it ever occur, and eight years later after I've been driving and just sort of thought, that hasn't happened yet and if it does, so. And when it did it sort of come round... but I think in my personal circumstances I think timing was a big issue because I had a lot of other issues going on in my life at the same time and I think it was probably the worst time it could have happened. But yeah it did, I had a preconceived... I don't know where the idea came from I just suppose it was always a thing in my head of it could happen and if it does I think I'm going to respond like this.

Interviewer: How did you think that you would respond?

Respondent: To be perfectly frank I thought that I wouldn't give a shit, to be quite honest, and I always thought that the only time it would ever bother me is if it was an accident and that gentleman didn't mean to be in front of my train, or if it was young kids. And I thought if it was somebody who wanted to end their life, get on with it, you know? And I think in my mind that still rings true, it's a case of

they guy wanted to kill himself, he's done it, and he killed himself, I didn't kill him, he killed himself, he jumped in front of my train and that's the end of that, so the guilt and blame and everything else doesn't come to my door. But it's just the way that what happened was that when I obviously naturally got taken off the track and got told, you now can't drive trains, I felt that control of my life and my programme and my career had been taken away from me, and it was that removal of control of my own life and my own direction that affected me and that's something I didn't anticipate, because when you're sort of left sitting around being told you can't do your job, you've got to go for this, you've got to go for that, you've got to go up for medicals, and now when you come back to work you've got to prove you're fit to drive, that aspect of it was never made clear to you, you were never told that that was going to happen so it left me unprepared for that. And it was that, I think, that affected me, the fact that my life had been irretrievably changed without any input from me, it was just a case of me being in the wrong place at the wrong time had had a knock-on effect that I'd lost control of and I got very resentful and cross about that, and I think those are the feelings that I didn't anticipate, I anticipated the guilt feelings, the blame feelings, the oh God what have I done feelings, but could I have done anything differently, could I have stopped the train, could this have happened, none of that happens in my mind, it's just a case of everything that happened afterwards on a personal level, especially as I said to you in the last meeting the way that the management were with me at the time, those are the things that I didn't anticipate because I honestly thought that management were going to be, we're so sorry this has happened to you, take as long as you need, don't worry about it, everyone in the company's behind you, we're sorry this has happened. That's, again, a preconceived idea of what would happen. And it actually transpired that it was a case I was made to feel I was swinging the lead and get back out there, and that, it was tough for me to get through because everything that I had prepared myself for had just unravelled and that was hard to deal with and that's the thing, that's where my issues came from.

Interviewer: So for you, for me to say that the graph suggests that you saw yourself before in these terms makes sense?

Respondent: Yes, it does. Because I was prepared but unprepared. I was prepared for what I thought was going to happen but very much unprepared and blissfully ignorant to what actually happened.

Interviewer: How about you now? So this would suggest that you see yourself now as in more these terms.

Respondent: Yeah.

Interviewer: Someone who is experienced, prepared, resilient, and perhaps somewhat more introvert.

Respondent: Yeah, I would say that preparedness comes from experience in my own mind, I now know what to expect and the railway rigmarole that goes with an incident of this nature. So in that regard experience now prepares me because everything that I didn't prepare myself for prior I've now experienced and now if it ever happens again, which I will never say it won't because it very well could, it could happen when I go back to work tomorrow, but at least now I know if it happens what the procedures are, what the systems are and how that aspect of it affects me, so I would say, yeah, very much so.

Interviewer: So these three, if you like, the graphs suggest they go together, so you're either mellow, overcome what happened, and more normal, or your traumatised, at the end of your tether and get cross easily. So the graph suggests that those go together and those go together and they're kind of opposites if you like.

Respondent: Yeah. I think it depends on a given day, to be perfectly honest. Sometimes I am mellow, overcome, normal, and other times, not so much end of tether but I do get, I think the word that's missing from there now is resentful. I do feel very resentful towards everyone concerned. I feel resentful towards the person, management, my colleagues, and working itself, I just feel resentful towards the job, but only like I say on bad days, on most days I'm okay but I do have swings of sometimes I'm okay and sometimes I'm not, I just have those sort of bipolar swings I suppose depending on the night I've had before, because I do have bad nights, especially if I know the day after I'm going to be going down a stretch of line it happened which I don't always do, it's only sometimes I go down that section of track.

Interviewer: So going down that section of track might you feel put you more in this position?

Respondent: Yeah, because sometimes if I have a bad night and I haven't slept which does happen then I'll wake up and obviously if you've not had a good night's sleep you don't particularly appreciate it and the way I work is to try and attribute blame to it and I think that puts me in more of the getting cross and resentful, which I suppose in a way all links into the word traumatised I suppose, I don't know.

Interviewer: For you, you imagine it might do?

Respondent: Yeah.

Interviewer: You said you start to propose blame, towards who?

Respondent: Ultimately the individual concerned I suppose because without that happening none of the consequences would happen, but they're not around and I try and look at it in a logical fashion and think that that person, it wasn't a personal attack on me, they didn't wake up that morning and think, "I'm going to look up what time Graham's going to drive through that station, and jump in front of his train." It's not a personal issue, I don't blame them. They're selfish and the act itself was a selfish, cowardly act in my mind, but whatever was going on in their life meant that that was the only thing they felt they could do, so I don't blame them per se but I feel that the way it was handled by my bunch was shocking basically, and I think I'll hold that resentment towards those for the rest of my life to be honest with you. I feel that I was very badly let down. And it sort of shakes your confidence in future events. Do you see what I'm saying? So you sort of think, well what if it happens again? Am I going to get the same shit all over again? That's how you feel, and it does make you feel resentful because you're driving a train thinking it could happen again, which in itself doesn't really bother me because it has happened once, if it happens again I'll get through it but you just feel that you don't like feeling that your job's at risk, you don't like feeling that if you don't jump through the hoops and comply with what they want, there's the door, and I feel that's what I feel resentful towards. Yeah, that's what I try and attribute blame to, I would say that the way the management were and the industry as a whole is has left me as the result, the result of bad management and an industry that's blind to what's going on, and I feel that personally that's why I'm here, I feel your research, if they pay attention to it

and try and integrate it into their human resources side of things the world for train drivers would be a better place, especially in my company. But unfortunately you've got as many managers as you have drivers to a certain degree. There are so many different managers across just one company. I mean you've got one manager who'll manage 40 train drivers and if there's 500 train drivers you're talking 10, 15 managers, so it depends on how each manager deals with a situation as well which unfortunately I've got a little bastard (laughing) but there you go.

Interviewer: So this graph would suggest that your ideal self, you now, and your partner are more closely linked than say you were before to your partner, you're more similar now. Does that make sense? So the way you see yourself before was more different to how you see yourself now and your partner is more similar to how you see yourself now. So in a way we could say that yourself now is more similar to your partner than yourself before the incident happened.

Respondent: I would say so, yeah.

Interviewer: What would you say about that?

Respondent: She's been through a lot, she went through a lot of trauma of domestic violence and abuse and it's not something that I could have related to previous to because I'd never before the incident ever experienced anything like that, and obviously no matter what the circumstances I feel that trauma is trauma and I can understand now her flashbacks of it and her nightmares and everything else, I can understand where she's coming from, whereas before I used to have that feeling of, it's in the past, you can't do anything about it, let's just move on with life, but now I more understand how she can't let it go, how she suffers from it, so yeah, I think that brings us –

Interviewer: So that could make sense?

Respondent: Yeah.

Interviewer: The other thing to say about the graph would be how you've viewed the person who committed suicide. So it would suggest that because this person's on the edge, that you view them quite differently to everybody else, do you see how everyone else is more around the middle and this person is on the outside and close to these kind of ideas. So traumatised, end of tether, selfish, thoughtless.

Respondent: Yeah.

Interviewer: And I was wondering if that linked to what you were saying earlier about you kind of see both of these in this person, so you see them as someone who was at the end of their tether.

Respondent: Absolutely.

Interviewer: But you also... so you swing between seeing them as someone who was at the end of their tether and vulnerable and traumatised, but also selfish and thoughtless.

Respondent: I would say that the two are differentiated in that one is the person and the other is the act. So I would say that a person was traumatised, at the end of their tether and obviously very annoyed with life, and the act of throwing themselves

in front of my train was very much self-absorbed, selfish and thoughtless because I believe that, in my mind I've got a picture of them being so sort of end of tether, sort of this is the only way, that they didn't really give any care of consequence, it was just a case of my life is shit and I want it ended and this is the way to do it. I don't feel that they would have thought, oh what about the poor driver, because if they'd thought anything like that they wouldn't have done it, they would have gone home and tried to sort life out, but they didn't, they done what they done, so.

Interviewer: So for you, how does looking at the person in that way, do you think it helps or hinders you?

Respondent: It helps me.

Interviewer: How does it help you?

Respondent: Because I feel that it wasn't a personal attack on me, it wasn't a statement of any kind to me, it was just like I say, just wrong place at the wrong time. I believe that they would have gone in front of that train at that time regardless of who was driving so myself personally it doesn't make it personal, it just makes it an unfortunate incident, and I do in a way feel very sorry for them and if time could turn back I wish that they could have got the help they needed and not felt they had to do that, but we don't live in that world, we live in the real world and the real world is that they did feel like that and they've done it and I'm left with the consequences so unfortunately I feel to some extent that what they were going through, not maybe to the same degree as them but has now been, the buck's been passed. They've gone and their troubles are over and my life which was ticking along quite nicely has been thrown into a cocked hat. And I just sort of feel that that buck has been passed on. Do you know what I'm saying?

Interviewer: How does that make you feel about them?

Respondent: Resentful. It does. It makes me feel, you know, you selfish bastard. I mean I don't know what his personal circumstances were and it doesn't really matter now but I just sort of feel that why... you know, there's plenty of other ways if you really wanted to end your life there's plenty of other ways of doing it and I don't see how taking yourself down the railway station and throwing yourself in front of a train and causing disruption and chaos and trauma to so many people is a good way of doing it, and that's how I feel, I feel resentful and I feel no matter how bad your life was maybe you should have just given it a bit more thought of, I want to do myself in, how can I do it where no-one else is involved rather than not caring who else is involved. Does that make sense?

Interviewer: Yeah. It's interesting what you said that you try and separate the person from the behaviour. I wondered if it's always easy to do that or if sometimes you might swing between.

Respondent: It's not an impulsive separation. I mean usually if you think about it on an impulse thought the two are the same thing but if you sort of break it down logically then it becomes in my mind the person and the act, but it takes an effort to do that, not much of an effort but an effort to do that.

Interviewer: Is it more helpful to separate the person from the act for you do you think?

Respondent: I don't think it makes any difference to be honest. I feel that it took one to do the other so although they are separate incidents in my mind they're part of the same package in some respect.

Interviewer: Do you think that the way that you saw yourself after, so that would be now if you like, more experienced, more resilient, swinging between overcome what's happened and feeling more traumatised, and in some ways it would also suggest, I don't know what you think about this, that you might consider yourself slightly more selfish, because before you were closer to somebody who was more giving to others, in a way. Is that something that makes sense to you?

Respondent: Yeah, it does.

Interviewer: That in some ways you would say that you might be slightly more selfish?

Respondent: Yeah, and I feel vulnerable at the moment and I suppose taking up these thoughts of being a bit more selfish and introvert protects me from any more shit invading my life and making life worse. Do you see what I'm saying? I find that before I would try and, if someone had problems and they came to me I would open up and listen to their problems and try and give advice and take it in and help where I could, whereas at the moment I feel I've got enough problems of my own, go away, take them to somebody else. And I think that's just a coping strategy to some extent, I just feel that I've got enough shit on my plate as it is, I don't need other people's and that's just the way that I feel at the moment. I'm sure I'll get over it. It's not something I like being, but it is a conscious decision. It's not something that's happened to me without me realising it, it's a conscious decision of, I don't want other people's shit, I've got enough of my own. And I suppose to some extent that has made me selfish and everything else but I think I've got the right to be like that at the moment and that's my coping strategy, that's my excuse is that I have got enough shit to deal with and I don't need other people's. That's just how it goes.

Interviewer: So that's helpful for you at the moment.

Respondent: Yeah, I think so, yeah.

Interviewer: To see yourself in that way.

Respondent: Yeah, but obviously that's got its knock-one effects, people go, "Oh," you know, and your relationship with people suffers. Yeah, and obviously I feel that it's times like these that you find out who your friends really are, because if they know what you're going through in my mind if I know someone who'd gone through what I did the last thing I would do is try and bring problems to their door. I would understand, even if I hadn't have had an incident I would understand, they've got enough on their plate, I'll take it to somebody else. And even if I didn't realise and went to them and said, "I've got this problem," and they went, "Well I'm not really interested," I wouldn't think, "Well f you and all then." But I suppose in my mind I feel that those sort of people that do adopt that attitude they weren't really friends to begin with if you see what I'm saying. So it bothers me to some extent but then when I break it down and think about it I sort of think, well if you don't understand that I might be having a bit of an hard time at the moment then you can go do one basically, you know what I mean? But I think that ties into the same thing, it becomes, I'm not changing for you, this is my personal way I feel and that's it. I mean obviously my nearest

and dearest like Mandy and my daughter and the family, I'll always have time for them but it's other people that I don't have much time for their issues.

Interviewer: So you said that part of you doesn't want it to be that way.

Respondent: No, I don't like being like that, I like being the way I was. I like to try and help and help people deal with problems and try and advise people and just be a friend to people, but I just find at the moment that it's just all a bit too much for me at the moment and that's my sort of way of shutting down, of saying sorry, the clinic's closed today, I'm on holiday, you know what I mean? That's just the way I feel.

Interviewer: So we've talked a bit about the way you viewed yourself before and after kind of helped and or perhaps hindered you in coping with what happened and a bit about how looking at this person has done what the person who committed suicide, so kind of looking at them. I wonder, do you think it's more or less useful to look at them as a person who's very vulnerable or a person who's very selfish?

Respondent: That's difficult, because I see him as both. I feel that especially if I look at it from a personal point of view I think one goes hand in hand with the other because to some extent I'm the same, I feel vulnerable which has made me selfish, so in that respect the two go hand in hand, I feel that if your coping strategy for being vulnerable is to try and be a little bit more tighter in your defences. But the thing about it is that I don't think about the person. That's where the differentiation is between the person and the act comes into mind. I don't think about them as a person I just think of the act because it was the act that affected my life, not the person. But yeah, I see them as being vulnerable and selfish but that's what I was saying about passing the buck, the way they were and the way they were feeling seems to have transferred to me now, and it's strange, and I just try and do my best not to pass that onto anybody else and that's my sort of goal, to make sure that the people closest to me don't suffer for it.

Interviewer: So looking at how you viewed yourself when driving after the incident compared to before, would say more experienced, more resilient, and more prepared. Still perhaps as professional but similar in the way that you said you view yourself. So do you think that the incident's changed how you are at work?

Respondent: It doesn't affect the way I do my job, that hasn't changed. It's not changed my feelings of the job itself, it's changed the feelings of the people I do it for and the people I do it with, not the actual doing of the job. The job itself will never change. Driving a train is driving a train. I am more hypervigilant I suppose is the word. I wouldn't go so far as to say paranoid but I'm definitely more alert, especially stations, crossings, suicide black spots, because there are a few, and you sort of take more of an interest when you're here of other people that have had them now whereas before it'd just be like, poor thing, I hope he's alright, whereas now you're like, really hope he's alright, you know what I mean? So yeah, I think that's the way I feel now.

Interviewer: What sort of qualities do you think a driver might have that might make it harder to cope with a suicide, personal qualities, in your opinion?

Respondent: Well from experience I don't know. I think because we spend a lot of time on our own I would say you lean towards a bit of narcissism to some extent,

especially given our grade within the railway, everyone wants to be a train driver within the industry, so we're sort of a paragon I suppose, we're sort of there at the top of the food chain to some extent and I feel that that's sometimes, it can make you a bit egotistical I suppose and you sort of think, I'm the big I am to some extent. It's an unhealthy way of thinking, I don't like it and I try not to, but I think that's what makes it horrible for us when it happens because I can't believe this has happened to me. But that's a difficult question. In my own personal I don't feel that way because it was always something that could and was I suppose statistically going to happen, and no I think it was just the preconceived ideas of how it would affect me.

Interviewer: So do you think there's something about what you're saying, I think that's interesting about spending a lot of time on your own and being quite highly valued in the industry, won't work without you.

Respondent: Yeah.

Interviewer: So do you think that could be a help or a hindrance when this happens?

Respondent: It is a hindrance now, now I think about it, because we are paid quite a lot of money. I mean my P60 for last year was 50 grand, so it's good money, and most of our skill set that we've got we'd never make that money doing another job. Their sort of earnings are well out of our reach for most guys on the job. And that sort of money attaches this sort of stigma to you where the management feel, we're paying you a lot of money, get on with it. And that's the problem is that when you're off track following one of these incidents and you are off sick, I mean I was off for three months, effectively they've given me close to £8,000 for three months for just sitting around doing nothing, and I think that they get pressure from above thinking, we're giving these guys a lot of money and they're not doing the job. We've got to get them back on there. But unfortunately that pressure is put on them and they put it a little bit even harder onto you, and then of course you're already under pressure, you already feel, I don't really want to go back yet, I don't want to face going back to work, and you just feel that if you were paid less it wouldn't be so much of an issue. Does that make sense? Because obviously while you're off folks have to cover your jobs which means paying them overtime, and when it comes to having to pay a guy, so they're paying my salary plus having to give another guy £200 plus a day on overtime to do my job, the bean counters are going to want their pound of flesh. And that's how you sort of see it, you sort of think to yourself that because of the costs involved of covering our work and us being non-productive that pressure is there for you to get back on. That is a hindrance, the actual nature of the job and the money side of it is a hindrance, do you see what I'm saying, and the fact that we are so vital to the industry whereas if it had been someone like ticket office or someone like that it would just be a case of, okay, well we'll just shut the ticket office for a couple of hours or whatever, whereas trains have to run so we have to get people no matter what it costs and get them out there, and I think in that regard it does put pressure on us.

Interviewer: And how about being like you said perhaps slightly narcissistic, do you think that could be a help or a hindrance when witnessing a suicide? You said that people think, well why would this happen to me? Could you just say a bit more about that?

Respondent: You just sort of feel that it's an industrial hazard so to speak but you just fall into a trap of thinking, won't happen to me, if it happens to me I'll deal with it, I'm alright.

Interviewer: Do you think that's something about the kind of people that are train drivers?

Respondent: Yeah, because we are tested, you have to do an aptitude test before we get given the job and I don't know exactly what they look for but I should imagine that working by yourself and dealing with out of course and quite stressful situations on your own is a big must for train drivers, because I mean even in an instance say where the train would break down in the middle of nowhere you can't just phone the AA and have them come out to you, you've got to get that train moving, and it's that sort of aptitude that they test us for. So I would say that, yeah, across the grade I would say that train drivers are quite unique I'd say as individuals. I don't know what sets us apart from other people, I think it's just spending long periods of time by yourself. You need to be comfortable in your own company, and I think that's the problem is that when you're on the down time when all the signals are green and you're just coasting along the job is a piece of pee, there's nothing to it. I mean you've been in a cab, you've seen it. When it's all going ticketiboo it's the easiest job in the world, and it gives you a lot of time to think and you can't talk to anybody so there's no distraction, you're just sitting there on your own, thinking, and if your mind's polluted you'll think about the wrong sort of things, that's how I find myself personally and you'll start to maybe think things that aren't necessarily... you know, your perception becomes polluted, you start to think that thing are happening that maybe aren't quite as bad as you think they are.

Interviewer: Almost like over-thinking?

Respondent: Yeah. That's just on a personal level. But looking out of a windscreen for eight hours a day, I personally I get flashbacks of it, of the incident happening, which triggers off thoughts.

Interviewer: When you're in the train?

Respondent: Mm.

Interviewer: Does it happen other times?

Respondent: It used to happen when it first happened I'd be watching the TV at home and I wouldn't be watching the TV I'd be watching a rerun of the incident happening again and I had serious concentration issues which is why I was taken off the track because obviously a bloke who's driving around with his head in the clouds, that's not good. And that was what I was saying about earlier about how the whole control side of it was taken away from me. And I think that's another thing about the way that we are is that we are in control, it's our train, that train won't go, won't stop, won't do nothing without us. We are there, we are the person in charge of that train and I think that does instil in a lot of us this sort of you're in control of a bloody great piece of machinery and it does sort of give you that power trip I suppose.

Interviewer: So is that a help?

Respondent: You become dull to it. When you first do the job and you do it by yourself for the first time you really get this sense of, you know, but like most things the

novelty wears off and before you know it you've still got that feeling but it's not (inaudible 00:39:31) for myself and I do feel it's a hindrance in that that's taken away from you. But some guys, they'd welcome having a few months off, you know what I mean? It just comes down to personal dealing, how you deal with it on a personal level. I would say that being on your own, being your own boss, being sort of revered for lack of a better word by other members of the railway, especially like guards and platform staff, they just want to be train drivers, they show an interest in being a train driver, they'll ask you about train driving, they'll talk to you about how you got onto train driving, what should they do, and it's just when someone shows that they're aspiring to do what you want to do it does sort of instil a sense in yourself. And also, because you're on your own there's no-one there to knock you off that pedestal, you're just there on it, you know, king of the iron road, you're there driving your train and there's nobody there to knock you back, you're left just you and your ego in a closed cab for many hours a day and it's a bit like a mould, it's just allowed to grow. I think that's what happens with guys.

Interviewer: So what happens when somebody jumps in front of it then to that?

Respondent: It's a bit like a bubble, isn't it, and it just pops and you're sort of left in this sort of shell of me in my big train and now all of a sudden it's me and now I'm suffering. Do you see what I'm saying? And everything you thought was going okay in your life and how you're doing really well in your life and how you're top of the food chain in your career all counts for shit and you become resentful because it's happened to you and you feel this way because of the job, that's how you feel about it and how you feel all of a sudden the thing that pays the rent and puts food on the table is now the thing that's made you feel shit. Do you see what I'm saying? It's also that sudden instantaneous change. It's not like a gradual decline, it's not start to get tired of the job and then start to feel, I don't want to do this no more, it's an instant change of one minute you're this, now you're that, and it's very difficult for me personally to cope with that gradient of change in the speed that it happened. I feel it's something I suppose my mind's trying to catch up with what's happened.

Interviewer: It makes sense. I only have a couple more questions. More of a question about what qualities do you think are important now you've been through it for drivers to have, now that you've been through this experience, if you could speak to these drivers who have not witnessed it what qualities would you say that they...?

Respondent: No, honestly I would be honest to say I don't know because I honestly don't feel they can really grasp what it's like until it happens, and as I know, people could tell you that it happens and as a train driver you see it happen to other people and it still doesn't prepare you for it. Does that make sense? You work and you live in an industry where you will see guys, and even if you're covering the shifts of guys that have had these incidents, and I've done that before, I've heard many people in my career that have hit people or come across bodies or whatever and they'll come off and they'll go for... still doesn't prepare you so I don't know what train drivers would need to have before these incidents, I just don't really think that there's a magic wand that can prepare you. I feel that the preparedness should be more aimed at the people who deal with us rather than us ourselves, I think it's those people that need to be brought up to speed, I don't think that we can be because the speed that it happens, the consequences it happens under, the circumstances of the individual concerned will all bear factors on how they react to this incident. So I feel that it's not our

place to be prepared for it, I feel that it should come that the support was there because I feel that from personal experience if the support had been as I thought it would be or if it should have been my feelings now would be a lot different, and I think that's an important point, I feel it's the management and the industry itself that should be more prepared for these than us ourselves.

Interviewer: What qualities do you think they need?

Respondent: I think they need to more compassionate. I think they need to remember that we are not just people who are costing them money. I think they should remember that this has happened to us while doing a job for them. We didn't ask for this to happen, we never went out for this to happen, we don't want this to happen. We understand that it can't be prevented because if a person wants to end up in front of a train no matter what you put in place they will find a way to do it. So we know there's no way of mitigating it or stopping it from happening but I think that they should know that it happens and they should know how to deal with it. It's been happening since trains were invented. I think I remember on Stephenson's Rocket's first trip someone was run over on it. It's been happening since trains were invented so it's not as if this is a new phenomenon, it's something that's been happening for hundreds of years, they should know how to deal with it and it just seems from my personal experience that they don't, they don't have the slightest inkling how to deal with us. And I feel that it's just a case of we need time to get our heads around what happened and to cope with it and not be made to feel that it's somehow our fault that we're off track. Because the blame switches from it's not your fault that this has happened but it's your fault you're taking so long to get over it. Do you see what I'm saying? So you're sort of made to feel to blame for how you deal with it rather than the incident itself. That's the sort of thing they need to address, they need to be more compassionate and understanding. It is a very unpleasant and very traumatic experience that they probably never have and never will being managers ever experience and I think they should just bear that in mind when they're dealing with us, that we are human beings, that we are going through a lot and we come to them for support, not get this sort of feeling of... because myself I got this feeling of glaring apathy where they just didn't give a shit, it's a case of yeah, it's unpleasant yeah but when are you coming back to work? That's where the changes need to take place, in my mind.

Interviewer: Before we're finished is there anything that you haven't said or that you want to ask about this?

Respondent: No, that looks like spider walked in ink to me. Doesn't mean anything to me.

Interviewer: In terms of what I've pointed out you felt that it did make sense?

Respondent: Yeah. If I was to think about when I was answering the questions with the cards that's sort of the picture I would expect to come up with. I know I'm a lot different now to when I was and how I feel about this person and this person. I mean I look at this graph and feel that my ideal self is somewhere between when I was driving before and when I'm driving now. Is that right?

Interviewer: That's what it shows, yeah.

Respondent: So yeah. These people here, the drivers who haven't witnessed a railway suicide, I'm surprised they didn't end up more down here.

Interviewer: They were a bit closer to the middle which suggests that you have less of an idea of them.

Respondent: I don't really have any idea, because as I say, I know how I feel but you can never know how other people are feeling without talking to them about it. No, I feel that you can't prepare anyone for it in my head, in my mind, you just can't.

Interviewer: And this person that you dislike is on the outside so different from these people, does that make sense?

Respondent: Yeah, well the fact that I don't like them puts them out there. Yeah, I think that's about right.

Interviewer: And when they're in opposite so like your ideal self and that person suggests they're the most different.

Respondent: Yeah.

Interviewer: So ideally you would like to be very not like that person.

Respondent: Absolutely.

Interviewer: Which makes sense.

Respondent: Yeah.

Interviewer: This person who committed suicide being on the edge suggests that you don't see them like anybody else.

Respondent: Yeah, I would say that. They are a unique individual in my mind. But as I say, it's hard to explain, I don't think of them as a person. I don't even know their name. I look at the act rather than the person.

Interviewer: What do you think would be the impact if you did know more about them as a person, if you knew their name, family?

Respondent: I don't think it would make any. Funnily enough the police officer who was involved phoned me while I was on the way up to see you and said that he's put the evidence pack into the coroner today and it might take three or four months before it reaches Coroner's Court and bearing in mind it happened at the end of September you're looking at nearly a year.

Interviewer: Are you expecting to go to court?

Respondent: I'm not expected to go because they've got high definition forward-facing cameras so they'll see it happen. They don't need my testimony.

Interviewer: Do you want to go?

Respondent: I wouldn't mind. It would just be, people use that word, don't they, closure, but I suppose it would be. I just want to hear the coroner say, just to say those words, that it was a suicide. Because at the moment I still don't know. I mean obviously I know because I saw it but it's not been officiated as a suicide. And I just feel that I just want to hear those words that it was a suicide, driver's not

to blame, just to hear that coming out of someone who's got that power just to say that. I think that would give me the closure, I think it would help me. But like I say, I don't like falling into the trap of thinking, I don't get into that trap anymore of thinking it's going to do this, you know what I mean?

Interviewer: That you'll react in a certain way.

Respondent: Because now I just feel, I think it might but I'm not going to assume that it's going to, I very much feel that that's a possibility but not definitive outcome, so it has changed me, but I think in a good way, I mean it might have made me a bit more cynical than I already was but I don't think cynicism hurt anyone, I think to be naïve and walk through life thinking everything's going to be hunky-dory you're setting yourself up for a fall in my mind, and the world don't work like that, and I feel that these sort of hard knocks, the school of hard knocks, is good, I think it's character building. I mean obviously this was a very hard knock but it's like a severe break of the leg, it'll get better, it'll be alright, and that's just the way I think. I try and think positive that the prognosis is that I'm going to be okay. I'm not okay at the moment but I'll be okay and I'll just try and remain positive. I don't feel, that's it, life's fucked, never going to get on with it, this is going to haunt me for the rest of my days. Yeah, it might very well do but I'll learn to deal with it and that's just the way I am. I just feel it hasn't even been a year yet, I've still got a passport to be a little bit upset about it and I'm not ashamed to be, I don't mind. I feel that if you try and bottle it up that leads to bigger problems myself. I feel that if you get help when you need it and talk about it when you need to, if you've got good support around you in your former family and friends you'll get through it whereas I think the people that are more on their own or more introverted and bottle it up and just pretend they're dealing with it, those are the people that it will affect more in my head. That's one thing I suppose as well just that if you're going to tell drivers anything tell them that if support's offered to you just take it, don't try and deal with it yourself. I don't think you can, because if you could people like you wouldn't exist, would they? There wouldn't be any call for counselling or psychology or anything like that because people would just be on personal coping strategies and get on with life.

: [End of Transcript]



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Interviewer: So this is basically a grid really.

Respondent: Yes.

Interviewer: So what I put in is, you remember when we did the cards last time?

Respondent: Yes.

Interviewer: I put in the words that you came up with to describe people into this and then the people that you described. It plots them basically, and so the idea is that as people are in an opposite side of the (inaudible 00:00:26) if you like then they're considered to be most different. So for example in this situation it suggests that you view yourself as very different to drivers who have not witnessed a railway suicide.

Respondent: Yes.

Interviewer: So is that something that you would agree with?

Respondent: I would say so, yes, because obviously we all have an idea what it's like, what it would be like, but until you actually do it, until you're actually in that train and hit somebody you don't know, you can't say, yeah well I can imagine what that's like, because you can't. It's lots of things like I couldn't imagine if somebody said to me their mum had died I couldn't imagine it, both of my parents are still alive and well, but I can't imagine that because it hasn't happened, and I think you do need firsthand experience to understand what it's like.

Interviewer: So what it would suggest as well is that you might view drivers who have not witnessed a railway suicide as slightly more reckless. So it doesn't mean that you definitely saw them in that way, it just means that they're closer to those kind of words than others. So closer to being reckless, closer to can't comprehend what it's like, and slightly closer to self-confident.

Respondent: I agree with that. I think before I had this incident I think I viewed people walking along the side of the track differently. I just thought, bloody trespassers, get off the track. But now I've had it you are viewing it slightly different. If they're on their own your first thought now is towards the brake because you're thinking, are they going to do it, or are they somebody who don't want to buy a ticket and figure they're walking down the railway line as the shortest route? So I think you do think differently.

Interviewer: How would you describe drivers who have not witnessed a railway suicide? What kind of words?

Respondent: Relaxed. More relaxed about people walking along. Unconcerned. They just don't comprehend what it's like. Unconcerned, that's not a word but you know what I mean, less concerned.

Interviewer: You've described yourself when driving a train now as more aware.

Respondent: Oh yes.

Interviewer: So does that make sense to you?

Respondent: It does, yeah. I am much more aware of what's going around me, even what's just in front of me. They always say when you first drive a train you only look at that little bit in front to the next signal, and then once you get more experienced you look further ahead, you're almost planning ahead. But then when you've had a suicide it sort of comes back again like that, you're more aware of what's just in front of your train, sort of the hundred yards in front of your train because it may be a trespasser who's going to do something.

Interviewer: So what this would also suggest is that although there are some differences, you now, compared to you before, isn't drastically different.

Respondent: No, not in my normal life, but my working life yes it's different, because I have a different view of the job and a different perspective on what can happen. But in terms of me personally, I would certainly say not that I am aware of. I wouldn't say that it's made any great changes to me outside of the job. I suppose because I'm doing this now, I've gone into the management side of things, it is something you deal with and I've sort of been directly involved in two since I've been doing this and I think even if it doesn't really affect me, I'll never forget it, put it that way. I'm not saying I'm affected by it in my daily working life or when I go to bed at night but I'll never forget it, and every one that we have just sort of triggers and I'll still see his face and still picture him and could tell you what he looks like and everything.

Interviewer: It makes sense what you say that yourself when driving a train is more different because that's you when driving a train now and that's you when driving a train before so this is in a different box so that would suggest that there is quite a difference.

Respondent: There is, because I definitely have a different awareness than before.

Interviewer: Something that, I don't know what you think, but this suggests that in some ways you now since the incident is slightly closer to your ideal self. I don't know what you think about that.

Respondent: I suppose...

Interviewer: Basically I'm kind of asking I guess do you see any positive changes in yourself since that happened or is there anything that you've thought?

Respondent: I think it certainly made me feel a little bit more sort of humble is the right word. Made me think a little bit more maybe about my own mortality, I don't know. But I think it probably made me think about things a little bit more, sort of almost how fragile life is in general, and sometimes you can't control what's going to happen, because obviously I had no control over that same as all the other guys, they had no control over that situation and I think it's not made me a better person but it's certainly changed my outlook on things a little bit.

Interviewer: How would you say?

Respondent: Well I think you always feel that you try to be in control of your own destiny, of your own fate, but I just think now sometimes you've just got to go with things a little bit, because sometimes you can't always control a situation, as I had no control over that. Doesn't matter what I did, that happened and that guy was going to do it. It was my train. What gives him the right to do that? But I do think it has made me go with the flow a little bit more, because I had no control.

Whereas because I think the way the train works, and if it's your car, I mean I've run somebody over before and although I didn't have a chance of missing, by what I did, by steering and everything else, she was alright. By the fact that it stopped quicker she was alright. But with a train you have no choice. I can't decide where it's going to go, all I can do is try and stop it. So I do think that it's actually made me realise that sometimes you can't always plan what's going to happen because it just doesn't work, especially once you're out there in that train if somebody wants to do that there's nothing you can do about it.

Interviewer: The words that you used to describe your ideal self and which you moved closer to after the incident were these things. Happy, thoughtful, philosophical, content, and somebody who has clarity. Would that fit with what you're saying there?

Respondent: I think it would actually, yeah. I think in terms of having clarity it does, it makes you realise that perhaps sometimes you can't change what it is and again I think I certainly am certainly more philosophical as I've just said. You do, it just happens, and you can't change that. I'm certainly probably a little bit more thoughtful about that.

Interviewer: And aware it would say as well, which you talked about, being more aware.

Respondent: Yeah, definitely, more aware of what's going on around you and more aware of how situations can just take over, without me doing anything the situation can take over. I'm aware of a lot more things.

Interviewer: Another thing is that your self before was more closely aligned to these ideas.

Respondent: Yeah, I probably always was a little bit reserved. Probably opened up a little bit more.

Interviewer: Since the incident?

Respondent: Since the incident and I've been doing this for over a year now, or for nearly a year, and I think it helped me make that decision.

Interviewer: How so?

Respondent: Well, you'd rather not have to hit somebody again and this opportunity arose so I took it. Obviously this has developed me as a person a lot more. It has changed the way I view things and it's changed obviously my working environment because it's almost convinced me to make a step.

Interviewer: So the person who committed suicide is on the edge here which suggests that you view them as very different to anybody else.

Respondent: Yeah.

Interviewer: Would that be something you would agree with?

Respondent: Yeah, I mean you cannot even begin to think what was going through his mind when he stepped in front of a train. To be so young and to want to do that. I mean you just can't even begin to think what's going through their mind.

Interviewer: These are the kind of words that are close to that person that you talked about when we last met. So confused, desperate, traumatised, impulsive, somebody who's not as happy.

Respondent: Yeah, definitely. I mean they're certainly going to be impulsive because if you stop to think about it, I'm sure if you stopped to think about, am I going to step in front of that train, you wouldn't. I mean did he plan it? I don't know. Apparently he walked quite a distance from his house to the line so he must have obviously thought about it but if he changed his mind and then suddenly went, actually I'm going to do this, certainly must have been traumatised and certainly desperate.

Interviewer: Are there any other words that you think of now that characteristics would describe that person?

Respondent: I don't know really. I think that pretty much sums them up. They've got to be possibly reckless. Then again I suppose if you're contemplating doing that you're not going to think of other people are you? It's a thoughtless act because of the impact it has on so many other people, and I think that's something which we talk about quite a lot as drivers and it is a thoughtless act because of the impact it has on thousands of other people. But obviously they're not thinking sensibly and clearly when they do that, are they? I wouldn't have thought so anyway. I've never asked somebody after they've been hit by a train but you wouldn't have thought they're thinking very clearly when they decide to do that.

Interviewer: Looking at how you saw yourself before and after, do you think that seeing yourself that way helped or hindered you after the incident? So seeing yourself as more of these things, do you think that was a help or a hindrance, the way you viewed yourself after it happened?

Respondent: I think it was a help. I do think it was a help.

Interviewer: How so?

Respondent: I think if you can look upon that type of thing in a philosophical manner after the initial incident, I think you've got to keep telling yourself that it doesn't matter what you did, that's still going to happen. I think you have to try and be philosophical about it and you have to be clear in your own mind that there was nothing more you could have done. Obviously the initial shock, and then obviously you're upset, then I was angry. I was angry because why did that person have to do this to me and to those 900 people behind me? But then you sit down and you think about it after a couple of days, once I'd sort of got things clearly in my own mind that I couldn't have done anything different, that I couldn't have stopped the train any quicker, I couldn't have done anything different than what I did that day, then you've got to say, it's just one of those things. I took my anger out on a bucket of golf balls, just went down the golf range and just smashed a load of golf balls and took my anger out on that. Didn't look where they were, just hit the damn things and thought, sod it? Then tried to be philosophical about it. But no matter what I did at that moment I couldn't have changed it. He made that decision, not me.

Interviewer: So for you that was a helpful way to view yourself and what happened?

Respondent: Yes.

Interviewer: How about how you viewed this person? So those words would suggest you're considering the mental state of the person.

Respondent: Yeah.

Interviewer: So do you think that was a helpful way for you to view that person or did it hinder you?

Respondent: I think it was helpful to try and figure out their mental state. I know from my point of view it was some time before I knew anything about him. British Transport Police took a long time to come and interview me after the incident and I suppose in a way I was hoping I didn't know anything. I was hoping the guy wouldn't just sit down and say, right, he was such and such. But the first thing he did as we (inaudible 00:17:21) he told me his age and his name. And I think once he put a name to him, I mean I think it was better then. If I'd have found out straightaway what his name was I think that would have been different, because that particular time when I hit him he was just a person and I almost didn't think of him as a human being, just thought of him as an object really, but then once a name was put to him that sort of took me back a little bit. Once a name and an age and this guy from BTP told me everything about him, life story, that sort of almost put me back a little bit.

Interviewer: Why do you think that was?

Respondent: Because then he became a person. He became a somebody. He became somebody's son or somebody's partner. When I didn't know his name or his age or anything about him he was just somebody I happened to hit with a train, but I think once the guy told me his name and his age and his mum and his dad and I thought, hold on a minute, now this is somebody's son. So this was some time after the incident, so I was already back to work then, back driving. But that sort of freaked me out.

Interviewer: You said that thinking of their mental state you think did help you. How do you think thinking those things about them has helped you?

Respondent: I think for me because I just viewed them as I suppose desperate, that it wasn't a personal thing. Because he was desperate obviously to end his own life he wasn't picking me as such, he was just picking the train. I think because almost again took me away from the fact that it was me. It was just somebody who wanted to get hit by a train and it was just unfortunate for me that it was my train. And I think that helped me try and almost take me out of the situation. Does that make sense?

Interviewer: Yeah, it does. And seeing him as somebody who's desperate and you could perhaps say unwell, helped you to do that?

Respondent: Yeah, almost took me out of the situation.

Interviewer: What do you think would have happened if you looked at them differently, say you saw them, that you didn't think so much about their mental state but you saw them as...

Respondent: More of a person?

Interviewer: Yeah. Perhaps a horrible person or...

Respondent: I mean one of the ones we had last year, the driver lives in the same road as all his family, and everywhere he goes this guy's family are there. And he said he's found that a lot more difficult because there is this connection. Whereas obviously I think for me there was no connection. I didn't know the guy and as far as I'm aware actually he wasn't a particularly nice person, because somebody I work with he was driving the car that he put his brother in a wheelchair for the rest of his life. So I'm not saying he was a particularly nice guy this guy who was in front of my train, so...

Interviewer: Some people view that person as very selfish.

Respondent: Oh God, without question. Alright, they are obviously got some mental issues otherwise why would they want to jump under a train, but it is a very selfish thing to do.

Interviewer: Because I was thinking that initially when we met you didn't say that word so much and it seemed that you were focused more on their mental health so I wondered if for you if you had thought of them as more selfish and thoughtless and ways that I guess we might associate with feelings more of anger, do you think that would have been helpful or a hindrance to you?

Respondent: I don't personally think it would have made the damndest bit of difference to me. For me at the time I was trying to I suppose take myself out of the situation by not viewing them as a person, not viewing them as in a person that stood in front of my train. I was more trying to view them as a person who just stood in front of a train.

Interviewer: So if you viewed them more as selfish then you'd have to kind of put yourself in it?

Respondent: Yeah, you'd have to almost see them more as a person, almost more of a human being rather than somebody who'd obviously just lost the plot, was obviously just completely desperate and steps in front of a train. Rather than steps in front of me, steps in front of a train. I just happened to be driving it. I think that's the way I try to deal with it. And this may sound really strange, please don't take this the wrong way. The thing is I think in terms of my recovery the time of year helps. Because I think because it was in July, I could do things. If it happened in January when it's freezing cold and you've got to sit in because the weather's not good. So because I could get out, I could do things with my family, I wasn't tied in, I think that helped me recovery.

Interviewer: You could go and hit those golf balls.

Respondent: Yeah. And straightaway I had a lot of people, a couple of people rung me up and they said, "Come on, you're going to come and play golf. No, you're going to do it. Don't sit in, you're going to come and play golf." So I had a lot of people almost dragging me out, and I do think if you can do that it does help you try and rationalise your own person a little bit. And initially I tried to take me out of the chair, almost taking me out of driving the train, just him in front of the train. But so many people, I mean people almost driving me mad in the end, but I do think the time of year is a help. If I'd have had it in January I don't know, it would have been worse because you would have been stuck in and couldn't just go and do a bit of gardening or whatever, it would have been a lot more difficult.

Interviewer: So it's something environmentally about how you might cope afterwards?

Respondent: Yeah, I do think so. I think the time of year, don't know, maybe it's a thing to look at, if you get a suicide in January are they off longer than those guys that have one in the summer? I know for me it helped.

Interviewer: I guess that's in contextual things that unfortunately we can't do much about. So what kind of qualifications, characteristics do you think a driver might have that might make it harder to cope with something like this? If you were to guess at the kind of person that might find it harder?

Respondent: I think I would imagine older drivers.

Interviewer: Why would you say that?

Respondent: Because sometimes you haven't got that need to go out and do things. If you've got a young family you've still got things to do, you have to do things. Maybe drivers have been doing the job a long, long time. Is there that real desire for them to actually try and work their way through it. Maybe if some of the younger guys they've got things and they just go out there and get on with it again because they've got a lot of their life to lead. But I'm certainly speaking from my experience that older drivers are more likely to be off for longer, because I don't know, I suppose once you've been doing your job a long time if it keeps happening you think, "What's the point?" But I do think young guys, and I do think the job is changing massively, train driving, and you're getting a much younger breed in. They know they've got to work, they've got families. Alright there's no financial loss when you're off for a suicide but they just get back out there and get on with it. But I do think older drivers probably would struggle a little bit.

Interviewer: What kind of qualities do you think, you might be able to answer this from your managerial position as well, but do you think are important for employers of employees involved in these incidents to have kind of characteristics if you like?

Respondent: We talked a lot about this just recently with the situations that we've had. It's very hard because people are all very, very different. People you'd think would be alright aren't necessarily alright. I think there isn't a set criteria laid down, how you deal with it. It's getting better. Things are now being put in place. Chains of care. We have procedures in place now to try and help drivers, and I think the days of just letting somebody have six months off are long gone. I think the medical side of things, obviously it's been a lot of research into this and you're never ever going to get away from the fact that everybody is different, every driver is different. Some people as I say they carry on doing the job, or carry on doing the next bit because they have the view well what can I do about that? And other people want six months off. It's a very difficult one to answer because you never know.

Interviewer: It sounds like you're saying that maybe a standard protocol would be helpful you think?

Respondent: I think for the early bit. Obviously we are getting more that way. If a driver has one, as soon as possible we try and get them up to Bupa at King's Cross and deal with the medical railways (inaudible 00:28:59) just to, if you like, get them started. But I know some drivers view that as, well send me up there just to

find out if I'm going to get back to work. But it isn't necessarily about that, because once you start that process then you've got a chain of care starting off. But I think it would be nice if all companies as a standard did that.

Interviewer: What did you want from your employers after it happened to you?

Respondent: Well in the two years since mine it's changed dramatically. There was none of that offered when I had mine. Obviously counselling was offered, let me know and I'll sort out some counselling for you, but there wasn't this thing with, right, get them up to Bupa as soon as possible. That was never offered. But was mine handled particularly well? I don't know. My driving manager sat there, I couldn't bloody get rid of him. He took me home and he wouldn't go. He was sitting there telling my wife about his cruise. But that's Dicksy for you. It is moving, I would say the whole care system is moving on. Could mine have been any better? It was fine for me, because of the approach I took to it, because after a little while I took myself away from being somebody who killed somebody because I wasn't. He killed himself, I didn't kill him. I couldn't have changed that. So looking at it logically I couldn't have done anything different. So that was how I kept trying to, whenever I took it back to, I couldn't have done anything differently, he was obviously in a very distressed state, obviously something was missing that made him want to do that, but I kept saying to myself... even my wife said, "Do you want to know who he was?" I went, "Why do I want to know who he was? As far as I'm concerned at the moment he's just somebody that stepped in front of a train, you start putting a name to him and he becomes a person with a family. At the moment I don't know anything about him. For all I know he's an alien." And as I say, fortunately I think I didn't find out who he was until much, much later on. Could have been probably different if I'd found out his name a lot earlier.

Interviewer: What qualities do you think are important for the significant people in your life to have after you've had an incident like this? How do you think it's important for them to be towards you?

Respondent: My family were fine. We talked about it initially and then just didn't really discuss it. My son was 22 when it happened, my eldest, and we had initial conversations and my wife talked to me about it and it sort of just, I think their view was if I want to talk about it I'll talk about it. And that worked for me.

Interviewer: So permission to but you didn't have to.

Respondent: Yeah. You can talk about it if you want but I wasn't sort of sitting there in a daze most of the time. Obviously if something was on telly like a railway thing like a level crossing or something on telly I sort of looked away, but they all accepted that, even my wife said once, "You didn't like that, did you?" I went, "No, I didn't." Or anything on telly which involved a train narrowly missing somebody. For me, the way they handled it worked. They know me fairly well.

Interviewer: So is there anything else that you wanted to add or you wanted to know about this?

Respondent: Now you explain what the boxes mean, it's clever actually.

Interviewer: Did you feel it was quite fair, what it suggests?

Respondent: Actually, yes. I can see where it says obviously there is where I was and that's where I've ended up, so yeah, it does make sense, because obviously to a degree it did change me. I mean not drastically.

Interviewer: Not in the opposite one which would suggest a drastic change, but there's a slight more.

Respondent: There is a move, and it makes sense.

Interviewer: Well thank you very much. That's it.

Respondent: I hope that was useful.

Interviewer: It was very useful, thank you.

: [End of Transcript]

APPENDIX 13 – Example of Coding Frame

Data extract	Coded	Research Question
It actually transpired that it was a case I was made to feel I was swinging the lead and get back out there R76-77	Swinging the lead  Get back out there	Self's view of others view of self  Self's view of others view of self
It was tough for me to get through because everything I had prepared myself for had just unravelled and that was hard to deal with R77-78	Everything I had prepared myself for had just unravelled  Hard to deal with	View of self  View of self
I: so for you, for me to say that the graph suggests that you saw yourself before in these terms makes sense?  R: yes it does. Because I was prepared but unprepared I27-28 R 80	Prepared but unprepared	View of self
I was prepared for what I thought was going to happen but very much unprepared and blissfully ignorant to what actually happened R81	Prepared but very much unprepared  Blissfully ignorant	View of self  View of self
I: How about you now? So this would suggest that you see yourself now as ... someone who is experienced, prepared, resilient, and perhaps somewhat more introvert I29-I31  R: Yeah I would say that preparedness comes from experience in my own mind, I now know what to expect R83-84	I now know what to expect	View of self after
Now if it ever happens again, which I will never say it won't because it very well could, it could happen when I go back to work tomorrow R86-87	I will never say it won't happen again  It could happen tomorrow	Impact of event  Impact of event

But at least now I know if it happens what the procedures are, what they systems are and how that aspect of it affects me R88-89	Now I know	View of self after

## APPENDIX 14 – Literature Search Strategy

Key textbooks relating to PCP and Trauma were read to expand the researcher's knowledge of these areas. This allowed more information to be gained on key theoretical concepts, as well as the identification of relevant authors and their corresponding papers.

Following this electronic databases including Web of Science; APA; ScienceDirect; PsychInfo and Pubmed and internet search engine Google Scholar ([www.scholar.google.com](http://www.scholar.google.com)) were systematically searched to identify the relevant research and theoretical developments. Through this process gaps in the literature were identified.

The following search terms were used in various combinations using the Boolean search terms or, and, not and various delineators such as “ and \*: Posttraumatic Stress; PTSD; Trauma; Traumatized; Traumatic; Protective factors; Resilience; Vulnerable; Risk factors; Stress; Vulnerability; Theory; PCP; Personal construct theory; Construing; Personal construct Psychology; PCT; Repertory grid; Constructs; Train driver; Railway suicide; Railway fatality; PUT; Person-under-train; Suicide; Railway accident.