COPING WITH CRITICAL INCIDENTS: A CRITICAL APPRAISAL OF STRESS MANAGEMENT AND SOCIAL SUPPORT WITHIN THE RETAINED FIRE SERVICE IN IRELAND

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ABSTRACT

The psychological health and safety of firefighters has become a significant issue for fire services in Ireland owing both to recent legislative changes and to increasing awareness of the potentially stressful nature of dealing with emergency situations. Critical incident stress management (CISM) initiatives have been introduced with a view to supporting the psychological health of fire crews and with the aim of protecting individuals from developing a psychiatric illness, namely post-traumatic stress disorder.

While research has consistently questioned the efficacy of such interventions, there has been little attention paid to how firefighters themselves actually construct their own experiences of dealing with emergency situations in the course of their work. This thesis addresses this imbalance by conducting both a qualitative and quantitative investigation into how firefighters in Ireland talk about the incidents they respond to. The first study details a discourse analysis which was conducted on the transcripts of seven focus groups which was conducted with 89 participating retained firefighters. Key discursive constructions were identified and explored in light of how best to provide psychological supports to fire crews. In order to further investigate these discursive constructions a quantitative study was then conducted with an alternate group of firefighters (n=40) using Q methodology. This triangulation allowed for subject positions to emerge that had not heretofore been considered when providing psychological supports to firefighters.

A number of important findings emerged. First, many of the subject positions explored highlight how firefighters primarily draw upon discourses of professionalism and how constructs of the "crew" can strongly mediate their experiences of the "critical

incident". Secondly, the research highlights how many of the notions inherent in the Mitchell model of CISM were not actually borne out in the fire fighter's own constructions, particularly with regard to the focus on the "critical incident' as being always/already a source of a traumatic response. These insights were then used by the Researcher to propose a framework of psychological support for fire services in Ireland.

Key Words

CISM / Stress / Post-Traumatic Stress Disorder / PTSD / Mitchell Model / Firefighters / Discourse Analysis / Q Methodology / Mixed Methods

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CONTENTS

CHAPTER 1

INTRODUCTION TO THE RESEARCH

1.1 Rationale for Study

Ensuring that the psychological health of employees is not damaged by virtue of the work that they do has been a 'duty of care' responsibility for employers following the most recent revision of health and safety legislation in Ireland (Health, Safety and Welfare at Work Act, 2005).

This 'duty of care' places a direct responsibility on employers to include psychological risks as part of their work-place risk assessment, to ensure that any specific risk to the psychological health of employees is eliminated or reduced. Occupational psychology has played a significant role in terms of advising employers as to the psychological risks present in the work-place; introducing organisational strategies for enhancing employee health and wellbeing; and in identifying the type of steps employers need to take both as a means of ensuring that employers are not damaged and that employers themselves are not sued (Kinder, Hughes & Cooper, 2008).

The Fire Services is one category of employer that has had to assess and respond to the risks posed to the psychological health of their employees, the fire crews, particularly in regard to the potentially distressing situations they encounter in emergency responses. This has led a number of Fire Services to invest in the introduction of a model of psychological support called CISM – Critical Incident Stress Management (Mitchell and Everly, 2001) which has been specifically developed for emergency responders. The

aim of this intervention is to help normalise the reactions of firefighters to the event they have had to respond to, to identify any potential candidates who may need ongoing psychological support, and to prevent the development of long-term psychological illness (Mitchell and Everly, 2001).

There has been significant and indeed highly adversarial debate in the literature regarding the efficacy of providing psychological debriefing after so called 'critical incidents'. Having conducted a wide ranging review of the CISM literature, Lewis (2003, p.331), concluded that three perspectives exist within the literature, "proponents of the intervention, critics of the intervention, and personal 'war stories' with no empirical data".

These strands accurately reflect the current nature of the debate. The proponents of CISM point to the many research findings that prove the efficacy of their interventions (Raphael & Wilson, 2003). They highlight the methodological flaws in many of their opponents' research findings (Raphael & Wilson, 2003); or claim that terminology is being confused and conflated leading to flawed research outcomes (Everly & Mitchell, 2000); or indeed criticize opponents for not having being trained in and therefore not fully understanding the true nature of CISM (Regel, 2007).

The critics to CISM counteract by reference to research which proves that it doesn't succeed in its stated aim of reducing the likelihood of further psychological illness among participants (Barboza, 2005; Bledsoe & Barnes, 2003; Devilly, Gist & Cotton, 2006; McNally, Bryant & Ehlers, 2003); or that conducting a CISM intervention such as debriefing can in fact lead to further harm (Cannon, McKenzie & Simms, 2003). In addition, opponents point to the meta-analysis of the published research conducted by

research centres such as the Cochrane Review (Rose, Bisson & Wessley, 2009) which stated that there was no evidence to suggest that early psychological intervention was effective. They refer to the clinical guidelines issued by august bodies such as the National Institute of Clinical Excellence (NICE) in the United Kingdom (2005) or the American Psychiatric Association (DSM-IV, 2007) both of which recommend that early psychological debriefing should not be implemented.

As a practicing occupational psychologist working with a variety of Fire Services in Ireland, this debate is both critically important but equally is extremely unhelpful. In the researcher's view having worked with fire crews for over 10 years, both sides fail to capture the reality for firefighters on the ground. Equally, having trained to an advanced level in the CISM model, the researcher is conscious of its inherent flaws, most particularly its attempt to normalise or pathologise firefighters' reactions to critical incidents. And finally, as a practicing occupational psychologist who is conscious of his commitment to do the best for his clients, the researcher wishes to ensure that whatever approach he provides is grounded in solid research and offers real benefit to individual clients.

1.2 Aims and Approach

This research has two objectives. The first objective, which is of great significance, seeks to critically evaluate many of the theoretical assumptions and social practices inherent within the concept and overall narrative of CISM as it relates to firefighters. As a great deal of the research relating to CISM on both sides of the debate is primarily concerned with its effectiveness there has been no evaluation of the model from a critical realist social constructionist perspective. The existence of critical incident stress

is taken as a given. However, it is this researcher's contention that critical incident stress is not a fact of nature but has been derived from and shaped by medical, legal, psychological, social and economic discourses which have brought it into being and made it into an 'object' with an ontological entity of its own – one that needs to be assessed, audited and managed by Fire Services management.

This research therefore sets out to perform that critical interrogation of the medical, legal, and psychological literature pertaining to the formation of critical incident stress. It will begin with an overview of the methodological framework adopted by the researcher in Chapter 2, with the complete literature review being contained in Chapter 3.

The second objective of this thesis is that it seeks to develop a model of support that has been informed by the experiences of firefighters themselves. An initial qualitative study in Chapter 4, seeks to understand the discursive constructs used by firefighters when talking about the work that they do. Given the critical realist approach utilised to explore the constructed nature of critical incident stress, it is theoretically valid to undertake a discursive approach and look for the variety of ways in which firefighters speak about themselves, their reactions to the emergencies they respond to, and how they understand the support as a concept in itself. The chapter is an account of the discourse analysis that was undertaken on the taped interviews with six serving fire crews who have experienced the current CISM for the past few years.

Chapter 5 contains a second study, which is a quantitative understanding of the factors identified in the first qualitative study. While the qualitative methodology allows for a number of constructs to emerge from the participating firefighters, such constructs need

to be validated by means of a quantitative methodology. In this regard the q methodology was used on data gathered from a number of other fire crews.

Chapter 6 will draw together the key insights gained from both the qualitative and quantitative studies. The chapter begins by briefly exploring the nature of mixed methods research before drawing together the key findings which can be utilised in developing a new model of psychological support for fire crews. It also outlines a programme or model of support which is proposed for implementation with fire crews. This programme will encompass the range of key constructions drawn upon by firefighters but which have been ignored or pathologised by existing models of support. It will attempt to produce a more occupationally relevant model of support for fire crews and evaluate how such a model will fit with the call for strengths-based (as opposed to victim-based) and context specific theories of resilience (Pack, 2012).

There is no doubt that firefighters deserve every support in dealing with the many emergencies that they respond to. However, it is incumbent on us as occupational psychologists to ensure that any support provided is meaningful and beneficial and not just that it makes intuitive sense.

CHAPTER 2

MIXED METHODS

2.1 Introduction

This chapter explores the mixed methods approach used in this study. It begins by introducing the concept of mixed methods as a research methodology, focusing on its history, role and application within occupational psychology. It then proceeds to briefly outline the qualitative and quantitative methods utilised in each study, with a more detailed presentation of the methods used being contained in Chapters 4 and 5. This chapter concludes with a statement of the epistemological position adopted by the researcher and how this influenced the choice of research methods.

2.2 Definition of and Rationale for Choosing Mixed Methods

Mixed methods is a relatively recent development as a research methodology. Traditionally, research within psychology tends to be approached from either a quantitative or a qualitative basis, with purists on both sides being critical of the assumptions implicit and the knowledge produced by the opposing side. Quantitative research has tended to look for objective, verifiable and replicable facts to account for social observations. Researchers adopting quantitative methods have tended to assume that there is a realist ontology which will be revealed once the appropriate method of investigation has been developed and applied.

Qualitative research, on the other hand, tends to reject such positivist and universalist claims to truth. Essentially, qualitative research tends primarily to be concerned with meaning. It seeks to understand how individuals experience particular situations, especially the quality of their experiences. At the core of qualitative research the participant is in their 'natural' environment. Qualitative research may be theoretically informed *a priori*, however, it is not the case of proving or disproving the theory but of understanding the participants' experiences that is the focus of this research. Also it is not concerned with causation, but rather in understanding how it is that participants construct their experiences of a particular situation being investigated (Willig, 2004; Burr, 2011).

While some researchers, such as Howe (1988), would argue that these two research paradigms are incompatible, there has emerged a greater acceptance that combining both qualitative and quantitative research methods has a distinct contribution to make in psychology's endeavour to understand our social world. This mixed methods approach produces a more comprehensive understanding of the subject matter at hand. Creswell and Clark (2011) highlight a number of the key components that underpin an effective mixed methods study, ranging from the methodological (careful collection and analysis of data, giving priority to one or both research methodologies, using the research procedures in a single study or as a multi-phase study) to the epistemological (ensuring that the methods used fit with a particular epistemology or world view).

Greene, Caracelli and Graham (1989) proposed five reasons as to why a mixed method approach is a valid research paradigm. They suggest that such an approach allows for (1) triangulation of research findings - whereby the findings of one study can be corroborated with that of another; (2) complementarity - where findings of one study

can be clarified or enhanced through the second study; (3) development - the outcomes of a particular research method can be used to inform the research being undertaken through the second research method; (4) initiation - whereby the research question can be further elucidated through the contradictions in research findings between both methodologies; (5) expansion - where inquiry into the subject matter can be both deepened and expanded through using different methods for different aspects of the research question.

2.3 Occupational Psychology's Approach to Mixed Methods

Quantitative research and the positivist knowledge that it produces still remains the dominant research paradigm within occupational psychology. Ever since Frederick Taylor's 'Scientific Management' (1911) and Elton Mayo's Hawthorne Studies (1932), occupational psychology has sought to model itself on the scientism inherent in other managerial disciplines such as engineering and production. As McAuley, Duberley & Johnson (2007) argues, positivism fits neatly with a managerial perspective which seeks to exercise greater control over work and workers, and creates a sense of neutrality and ethical rigour to the work of a manager.

Of itself, a quantitative approach to research can be conceptually quite limiting. It theorises the human subject as being a discreet, given entity, in possession of a relatively stable set of particular traits (Cattell, 1946) or preferences (Myers and Briggs, 1985). Occupational psychology rarely explores how human subjectivity is produced through the technology that it utilises to assess or analyse human subjectivity (Rose, 1999). When it comes to language, quantitative research in occupational psychology

tends to adopt a realist perspective, using language only as a referential process while ignoring its capacity to be used symbolically (Saussure, 2006).

There is, however, a growing awareness starting to emerge that much of the knowledge produced through quantitative research is of itself limited and limiting. For example, Gillespie (1993) undertook a critical review of the Hawthorne Studies and highlighted that many of the conclusions drawn do not after all stand up to independent verification. It is not that the researchers misconstrued their findings but that they ignored or deemed as irrelevant many of the other factors that could account for the outcomes which were apparent in the finding. His conclusion that in research "meaning is not discovered; it is imposed" (p.4) has both a significance and a salience which is often overlooked in quantitative research.

While disciplines such as critical management studies indicate an increasing openness within academia towards critically evaluating the nature of managerial and organisational 'science' (Grey & Willmott, 2005), such an openness is still at an early stage amongst occupational psychology practitioners. For example, Fairhurst (2007) in her analysis of the discursive constructs around the topic of leadership, acknowledges how practitioners are "too oriented towards organisational interests" (p.190). So, although the way is open for practitioners of occupational psychology to critically deconstruct each of its practices, it would appear that the needs of the client are never too distant a consideration.

2.4 Approach to Mixed Methods Adopted in This Research

This study uses a mixed method, which incorporates a qualitative study utilising discourse analysis followed by a quantitative study incorporating a q methodology.

Discourse analysis was chosen because the research has sought to explore how firefighters themselves discursively construct their experiences of the emergency situations which they encounter. What has prompted this research has been the researcher's experiences of working with fire crews in the immediate aftermath of them responding to crisis and emergency situations. Through listening to and working with these crews it became apparent to the researcher that many of their responses, experiences and reactions were not captured in the psychological model of critical incident support as utilised by the researcher. Through his work, the researcher became attuned to the language which firefighters were using, and in conducting this research wanted to ensure that the methodology was focused on unpacking the constructions drawn upon within their use of language.

In response to this experience the researcher wanted to use a research methodology which looked at how language is used to construct their social and psychological worlds. Discourse analysis was selected as being the most appropriate methodology in order to achieve this objective. Potter and Wetherell (2002) first introduced the concept of discourse analysis as being a legitimate means of exploring psychological phenomena, viewing language as a discursive action rather than a cognitive process. The 'turn to language' in psychology invites researchers to explore how language is used by participants to open up particular ways of being in the world; how it can close off other ways of being; how language can be constructive as well as being descriptive;

and how language is always doing something and not solely just reflecting what an individual is saying (Willig, 2004).

Having explored some of the key constructs drawn upon by firefighters when discussing their experiences, the researcher wished to utilise a research methodology which provided some degree of refinement or verification of the conclusions drawn in the quantitative study. It was important that the qualitative research method was consistent with the epistemological position adopted by the researcher, which essentially is a constructionist one. In order to achieve these objectives, the researcher chose to conduct a q methodology.

Q methodology as developed by Stephenson (1953) allows for the quantitative study of subject positions. In a q methodology participants are presented with a range of views or subject positions on a particular topic. It is up to them to decide on those views which are meaningful for them. Through a process of ranking and prioritising those views participants are in a position to express their own subjectivity, which in turn can be quantitatively compared with others who have been presented with a similar set of statements. Q methodology allows for each ranking or sorting to be factor analysed; particular factors representing specific viewpoints can then emerge. These viewpoints can only be analysed *a posteriori* within the context of the statements which were loaded onto them (Coogan & Herrington, 2011).

By utilising a triangulated research paradigm which incorporates both a qualitative study and a linked but independent quantitative one, it is hoped that a more sophisticated account of firefighters' experiences of emergency situations can emerge.

2.5 Epistemological Position Within This Approach

The epistemological position adopted in this research is that of critical realist social constructionism (Harper & Thompson, 2012), often referred to as moderate constructionist or critical theory approach. Critical realist social constructionism adopts elements of critical realism, in that this research method can tell us about reality but not directly mirror it, capturing aspects of its fullness. The approach requires the researcher to move beyond the constraints of the data produced by the research methods themselves and to explore how the very concepts themselves are produced and constrained. Essentially a critical realist social constructionist position proposes that while the research can tell us about reality, any analysis equally needs to identify the broader social, historical and cultural contexts, which then allow particular concepts and various subject positions to become available.

Such an epistemological approach has been adopted by this researcher for three reasons:

- It is consistent with the research questions which this study seeks to address. Essentially the research focus is to understand how it is that firefighters construct their own experiences of dealing with the emergencies which they respond to. Understanding that requires the researcher to explore how concepts such as health and safety, and trauma and stress are shaping the way firefighters come to experience their reactions, in addition to being shaped by their respective academic disciplines. While the research needs to draw upon the discursive constructs used by the participating firefighters, it equally needs to explore the wider social, historical and cultural context which allows the various understandings to emerge.

- While still relatively new within occupational psychology, critical realist social constructionism is being used within other areas of academic research in psychology, particularly in clinical and counselling psychology. Pilgrim and Bentall (1999) are using critical realist social constructionism to explore how everyday concepts such as misery are being medically reconceptualised as depression. Similarly, rather than looking for the frequency or occurrence of critical incident stress among firefighters, this research is interested in deconstructing the very concepts which underpin the production of critical incident stress in the first place, in order to then explore how firefighters identify with, or reject, that subject position. A critical realist social constructionist epistemology acknowledges that the reaction of firefighters is real and material, but explores how that materiality is made real.
- A critical realist social constructionist position is entirely consistent with the mixed methods research methodology used. The somewhat relativist data produced by the discourse analysis will be either supported or unsubstantiated through the 'realist' data produced by the q methodology used in the quantitative study. In other words, it makes the researcher mindful of the fact that neither the information gathered through the discourse analysis, nor the data accumulated through the q methodology are a complete reflection of the reality for firefighters. Both are provisional and subject to interrogation, and have been produced by a range of factors, only some of which are within both the participant's and the researcher's awareness.

2.6 Summary

This chapter has set out both the epistemological and methodological foundations of this research. The triangulation of both qualitative and quantitative studies allows for firefighters' own experiences of the emergencies they encounter to emerge by means of the discourse analysis, and to be further interrogated by means of a the q methodology. It must be recognised that the reason why their constructions are of such significance to this researcher is because their meaning occurs within an occupational context that privileges a particular interpretation of their reactions over all others. The next chapter will explore the legal and organisational factors that construct the firefighters' responses as being problematic for employers.

CHAPTER 3

LITERATURE REVIEW – A CRITICAL REALIST EVALUATION OF CISM

3.1 Introduction

This chapter takes a detailed look at how the reactions of firefighters have come to be viewed as a potential form of psychopathology called 'Critical Incident Stress'. The chapter begins by outlining the legislative context in which the psychological health and well-being of the employee has been reified as a legal and medical object. It is this legislation which establishes a framework whereby the psychological health and well-being of firefighters has become an object of study within the Fire Services in Ireland.

The chapter then proceeds to explore how the managerial discipline of Health and Safety makes the workplace into a psychologically hazardous environment. In an effort to produce a psychologically safe working environment, Health and Safety practitioners have replicated and applied a process used to identify and assess for physical hazards when dealing with psychological risk. In particular, this section looks at how the search for environmental psychosocial hazards, combined with a theory of stress which relies heavily on the notion of environmental stressors, has led researchers to reify many aspects of the work environment as being problematic. However, this researcher will question the efficacy of such an approach, given that many of the tools used were not fit for purpose, were theory laden, and ignored many evolving theories of stress which show less concern with stressful environmental factors but which introduce notions such as relationship within their models.

The chapter then proceeds to explore two key psychological concepts which represent the primary risks to the psychological health of firefighters. In particular the research looks at two separate but related constructs. Firstly, post-traumatic stress disorder (PTSD) is widely recognised within the psychiatric community as a psychological illness which can result as a consequence of exposure to trauma (American Psychiatric Association, Diagnostic and Statistical Manual IV, 2007). This research will explore how the concept of 'exposure' as contained within the aetiology of PTSD has framed and informed the understanding of firefighters' psychological health and safety, particularly in relation to critical incident stress.

The second psychological concept which is explored in this literature review is that of critical incident stress, also known as the Mitchell Model of Critical Incident Stress Management (Everly & Mitchell 2000). The reason why a review of the literature on critical incident stress is necessary is because it is not just an emerging psychological concept, but that it proposes a particular set of interventions among firefighters in the immediate aftermath of a critical incident. This model has been subject to widespread controversy, particularly in terms of its effectiveness in reducing firefighters' negative psychological reactions (Rose, 2007; Barboza, 2005; McFarlane & Bryant, 2007). However, in addition to critically evaluating CISM's capacity to reduce the likelihood of post-traumatic stress disorder occurring, the researcher additionally wishes to explore the productive nature of the CISM model itself, in particular how the language used seeks to pathologise and normalise firefighters' own reactions.

The literature review will conclude by drawing together a number of the key points which have emerged, and by exploring the significance of them for the qualitative and quantitative studies in Chapters 3 and 4.

3.2 Health and Safety Legislation

Recent changes in Ireland's health and safety legislation, the Health, Safety and Welfare At Work Act, 2005, (HSW Act) have made an important declaration as to how the individual is constructed both as a legal and medical entity within the workplace. For the first time in Irish legal history an Act has been implemented that legally recognises psychological illness and injury as an entity in its own right - that the presence or existence of a psychological illness is not dependent on the presence of a physical illness or injury. Previously, in both statute and case law, damages for psychiatric illness or injury could not in their own right be sued for. There had to exist a physical illness first and foremost; only then could any additional claim for psychological illness be made. Usually, in such cases, the claimant sought and was awarded an additional amount for 'pain and suffering' arising from the physical injuries which they had suffered. However, in the 2005 Health and Safety Act, the concept of injury was extended to include any illness or injury both psychological and physical. Section 2 of the 2005 Act defines personal injury as including "any injury, disability, occupational injury or disease, any impairment of physical or medical condition" (Health, Safety and Welfare At Work Act, Section 2, 2007).

One of Ireland's leading experts in Health and Safety law, Geoffrey Shannon, has produced extensive legal opinion on how this fundamental legal change will be interpreted by the courts. He makes two important observations which have significant implications in terms of the support being provided to firefighters. Firstly, he affirms that the concept of a psychological injury can stand on its own grounds legally as causable action. Shannon (2007) states "the distinction between physical and psychiatric injury is no longer either medically or legally defensible" (Shannon, 2007 p.65). Here,

Shannon clearly asserts that the courts have adopted a position that the validity of psychiatric medicine is every bit as accepted as physical medicine. The lesson for the employer is that the psychological health and safety of the employee is to be regarded as seriously as the physical. The role of the occupational psychologist therefore has expanded into understanding the nature of psychiatric illnesses.

A second, and somewhat more worrying assertion by Shannon (2007), is that it is not only in relation to recognised psychiatric illnesses that the potential liability extends to, but that it equally applies to any psychological damage which an individual can prove has been caused by virtue of their working environment. He states:

> If liability is to be imposed on employers for mental strain not amounting to a recognised psychiatric illness, then the litigant will have to show:
>
> (1) clear evidence of the damage suffered and the extent of that damage
>
> (2) a clear causal link between the damage suffered and the employment; and
>
> (3) that the damage to the litigant was foreseeable by the employer.
>
> (Health and Safety Law And Practice, 2007).

Shannon clearly maintains that the 2005 HSW Act can be used to make provision for other forms of psychological damage which may occur for an individual but which may not be readily or clearly identified or indeed agreed upon by the Occupational Health community. Psychological damage is wider than the illnesses and injuries contained in the psychiatric texts books such as the DSM-IV (Diagnostic and Statistical Manual 4 / IV, 2000). Once an individual can show that their psychological well-being was damaged, and that that damage arose as a result of their experiences in the workplace, and that the employer was aware such a risk was possible, then the employee has an actionable offence.

It is clear the 2007 Health and Safety Act has important implications for the management of the Fire Services. Not only does it place a duty of care on the employer, but it sets a clear obligation that the psychological health of fire crews is as equally important as their physical health. The Act further implies that Fire Services management need to understand what psychiatric medicine can tell us about the types of illnesses and injuries which can occur within a working context. Finally, the Act extends the concept of damage beyond those illnesses recognised within psychiatric nosology to include psychological damage of any sort. While the legal implication for the management of the Fire Services is clear, what is not so straightforward is how the psychological health and well-being of fire crews is to be protected. In answering this question, the Fire Services have had to turn to the guidance provided by Health and Safety professionals and, in particular, to the expertise provided by occupational psychologists.

3.2.1 Health and Safety as a Managerial Discipline

While the Health, Safety and Welfare at Work Act (2007) establishes the legal framework for protecting the psychological health and well-being of individuals in the workplace, what Anleu (2007) calls "state juridification", it is the managerial discipline of Health and Safety which makes that obligation real at an individual and organisational level (the juridification of everyday life). Essentially, it is the responsibility of Health and Safety to ensure that no aspect of the working environment causes any injury or harm to occur to individual employees during the course of their work. The practice of Health and Safety involves assessing the work environment for any potential hazards which may exist; determining whether the degree of risk exists, both in terms of probability and outcomes attached to the hazard; and identifying

solutions which either eliminate the hazard or reduce the risk of damage actually occurring as a result of exposure to the hazard (Dunne, 2000).

In seeking to create psychologically safe working environments Health and Safety practitioners tend to replicate a process that is commonly utilised when dealing with physical safety at work. In Ireland, the Health and Safety Authority (2006) recommends a process that begins by identifying the environmental hazards which can be shown to be a potential cause of an illness or injury. Once identified, a process of assessment begins whereby the actual risk of the injury or illness occurring is established. The risk assessment then addresses certain questions. How likely is it that the hazard is going to cause an illness or injury? How often is the event likely to occur? How many people will be affected? Finally, the process concludes by taking steps with the aim of reducing or eliminating it and then assessing the risk (or probability) of it actually inflicting damage on those coming into contact with it.

Risk management has been widely advocated as a means of identifying and eliminating psychological risks in the workplace. Cox et al. (2000) have proposed a risk management approach which advocates the use of a predefined taxonomy of potential psychological risk factors in addition to asking open-ended questions when identifying possible psychosocial risk factors in the workplace. While they acknowledge the perceptual problems which exist within a self-report process, and the difficulties inherent in deciding what actually constitutes a psychosocial hazard, they are none the less content to promote a process which solely looks at the work environment and not the individual when it comes to sustaining psychological health in the workplace.

In adopting such a risk assessment approach Health and Safety practitioners have committed the fundamental error of conflating both hazard and risk when they are in fact quite different constructs. As Breakwell (2007) defines it, a hazard refers to something that can lead to harm. It can be physical, non-physical, man-made or naturally occurring in nature. Any hazard can cause harm. However, Breakwell defines risk as consisting of two dimensions. The first dimension is its probability of occurring (e.g. there is a risk of snow today). It is mathematical. The second dimension of risk is its effect - the consequence or outcome which has happened as a result of that hazard occurring (e.g. the roads will be treacherous if it snows). In conflating hazard with both the probability and outcome dimensions of risk, Health and Safety practitioners may fall into the danger of making every aspect of the work environment a hazard and creating causal relationships where none exists. What constitutes a psychological hazard must reflect individual perspectives, as subjective evaluations of the work environment are highly related with subjective experiences of well-being (Van Ypren & Snijders, 2000). A more sophisticated means of understanding how hazards are constructed in the workplace is warranted.

3.2.2 Stress

Stress remains the fundamental concepts for psychologists seeking to understand individual health and wellbeing in the work place. When it comes to dealing with psychological hazards and risks in the workplace the concept of stress underpins many of the theories which have been developed to account for psychological (and indeed physical) illness in the workplace. Ever since the General Adaptation Syndrome (GAS) was proposed by Selye (1956) a causal link has been established between factors in the environment and individual physiological reactions within the human body. While various psychological theories have been proposed to account for how the stress process

works (Karasek, 1979; Warr, 2007) each theory has operated from the premise that the stress response is the fundamental human process when it comes to explaining how the health and safety of individuals can be damaged by their working environment. Some researchers (e.g. Aldwin, 2007) somewhat triumphantly and without any hint of irony go so far as to state that stress is the closest which psychology has to a 'unified field theory' akin to that offered by Einstein in the world of physics.

In terms of this research the questions emerges what are the main concepts of stress to be considered and how can they help or hinder our understanding of Fire Fighters experiences of themselves and the work that they do.

From a theoretical perspective, attempts to define the concept of stress in the workplace have been approached from two key perspectives – (1) biologically based theories (2) the theories that focus on stress as primarily being a process of cognitive appraisal. As shall be discussed, each perspective has contributed to the study of stress within the work place, but equally each theoretical perspective can be regarded as being problematic and limited.

3.2.2.1 Biological Models of Stress

Biologically based theories of stress point to the existence of particular hormones as a means of indicating that "stress" is present. In effect these theories are trying to create the link between a psychological state and the presence of particular physiological responses within the body. Their focus is not on the environmental factors that cause the physiological response to emerge, but rather the physiological changes that occur within the individual which evidence the presence of the stress response.

Physiologically based models of stress have had a long history within psychology and continue to be popular to this day. Selye (1956) sough to produce a coherent physiological theory of stress, one that mapped a number of observable physiological responses over time. He proposed a General Adaptation Syndrome (GAS) consisting of three phases – alarm, resistance, and exhaustion – each which can be marked through a series of physiological changes and responses. He argues that the GAS is primarily responsible for changing the way that the body functions, and as a result, can be considered as the main reason why so many illnesses can be considered to result from stress.

Selye's theory has had a profound effect on the study of stress in the work place, particularly with regard to protecting the employee's health and safety at work. It has shaped practitioner's thinking about work-place stress into a model which seeks to identify those factors in the work place which can be deemed to be sources of stress (stressors). Each stress audit conducted in the work place starts with questioning participants about identifying those factors in their work environment which they regard as being to be a stressor. The method of investigation has been produced by reference to the theory which informs it. Furthermore, by creating the link between the general Adaptation Syndrome and illness the theory has produced stress primarily as something negative, to be avoided as it can cause illness. Much of the research on the physiology of stress has sough to explore the links between the GAS and illness in the work place such as Frankenhauser (1986) who has investigated the workings and relationship between the neuro-endocrine system, work performance, and both physical and psychological health.

A further product of Selye's theory of stress and illness is that it has constructed the work place as being a potential source of stress, one which can produce illness within an employee. Stress therefore has become an object of concern for the work place, one which if left unattended creates a direct liability for the employer.

3.2.2.2 Cognitive Appraisal Models of Stress

This theory of stress primarily focuses on the individual's cognitive appraisal of situations, classifying them as being either threatening or non-threatening. Lazarus and Folkman (1984) have been the primary proponents of this theory and in it they focus on how the individual's cognitive evaluation of can simultaneously produce both positive and negative responses and therefore these should be considered as separate but related constructs. They propose a transactional theory of the individual being in and appraising their environment and argue that following the initial appraisal, an individual can focus on the source of the stress or their own response to the stress in their attempt to manage the stress response. Lazarus and Folkman (1984) define stress as "a relationship between the person and the environment that is appraised by the person and taxing or exceeding his or her resources and endangering his or her wellbeing". While their theory acknowledges the existence of positive responses, Lazarus and Folkman primarily focused their research on stress as a negative response and the resulting coping mechanisms individuals can use to alleviate them (Lazarus, DeLongis, Folkman & Gruen, 1985). Stress therefore is a complex process, involving any number of variables both within the environment, within the person, and within the appraisal process engaged in by the individual.

While an appraisal approach to stress may appear to be a more dynamic and rich conceptualisation of stress, it does present the study of stress within the work place with

a number of significant problems. First, it allows for any number of factors either within the environment, or within the individual, or within "appraisal" itself, which can be used to account for how one individual experiences an situation as stressful yet another doesn't as to render it too complex a concept to allow for meaningful interrogation in the work place. Secondly, it produces a model of stress that constructs stress as continually shifting and changing in accordance with how appraisals themselves can shift and change over time. From an applied and research perspective (such as in a research question like this thesis seeks to address), such a construction requires repeated and longitudinal studies in order to provide meaningful insights into how "stress" is produced and experienced at work.

3.2.3 Difficulties With The Definition Of Stress

However, it is this researchers contention that conceptually, theoretically and practically, occupational psychology has been somewhat limited by its focus on stress to account for the psychological and physical well-being of individuals at work. A number of reasons underpin this assertion. First, as a concept, stress is poorly defined. Dewe and Cooper (2012) affirms that researchers and authors are still not clear what is being discussed in stress literature, and the extent to which much of it actually reflects individual human experience. He exhorts researchers to be clearer about what it is they mean when they talk about stress, as theoretically some confusion still remains. They advocate that although the concept of stress remains valid, because stress involves emotions the focus of researchers should now turn to studying discreet emotions in the workplace. He states, "focusing on emotions not only overcomes the ambiguity that surrounds the troublesome word stress but is more likely to capture the stress experience" (p.74).

Briner (1997) Briner and Daniels (1999) asserts that the concept of stress has become so confused that it should be abandoned and that the focus instead should be on studying people's feelings and emotions in the work place. He argues that the word "stress" can be used to refer to matters that are neither conceptually nor empirically related. For example, the word stress can be used to refer to (1) a biological/physiological phenomenon (2) something that negatively impacts on performance (3) a factor which can be used to account for the development of an illness (4) as a precursor of a psychological response. Briner equally argues that the resulting stress research is methodologically poor and that the concept can at best be regarded as a modern myth.

A second reason why this researcher finds the concept of stress problematic is that at a theoretical level the concept of stress uses a language and framework that positions the individual and the environment as oppositional, threatening, and as being in conflict. While each theory of stress may offer differing definitions to mediate the relationship between the individual and the environment - such as through a series of cognitive appraisals (Lazarus, 1984); or identifying a necessary and sufficient level of organisational 'vitamins' (Warr, 2007); or Karaseks (1979) exploration of the relationship between organisational demands and individual control - stress is still fundamentally constructed as a something negative. As Nelson and Simmons (2003) state, the emphasis is on the negative because the understanding of stress has been deeply rooted in a pathological understanding of stress. A more positive understanding of stress is being developed through recent research into positive psychology, with studies emerging which explore concepts such as positive affect (Watson & Pennbaker, 1989), and meaningfulness (Spreitzer et al. 2005).

A third problem which currently exists with the concept of stress in the work place is that, at a practical level, much of the activity of occupational psychology has concerned itself with hazard identification and the provision of assessment tools which are of questionable value. As has been discussed in a previous section (3.2.1) the conflating of hazard with risk has led occupational psychology down a path which seeks to assess each aspect of the work environment for its pathogenic capability. For example, Leka, Griffiths and Cox (2003) analysed the workplace with regard to ten potentially stress-inducing aspects of the work environment which included job content, workload and work pace, work schedule, control, environment and equipment, organisational culture and function, interpersonal relationships at work, role in organisation, career development, and home/work interface. While Dewe & Cooper (2012) calls for the ongoing need to identify workplace stressors in accordance with the ever-changing nature of work, such a call only succeeds in replacing one set of stressors with another. Furthermore, an extensive and critical review of the measures used to assess psychosocial hazards in the workplace concluded that the evidence supporting the reliability and validity of the tools used was, at best, limited (Rick, Briner, Daniels, Perryman & Guppy, 2001). They conclude:

> In general, the quantity and quality of evidence relating to the reliability and validity of hazard measures is limited. This means that in some cases only tentative conclusions can be drawn about reliability and validity. It also means that for many of the measures currently in use there is simply no significant body of evidence about their reliability and validity. (p.76)

3.2.4 Conclusion

Organisationally the concept of psychological health and well-being is embedded within the parameters of a legal relationship between the employer and the employee. This has

had a profound influence on how organisations, through the managerial discipline of Health and Safety, tend to view the psychological well-being of their employees. It creates a dynamic which views the employee as being a potential 'victim' and the working environment presenting as a myriad of threats to the psychological health of the individual.

The dominant psychological model of stress reinforces such a dynamic. It deconstructs the working environment into a set of discreet 'parts' each of which has the potential to cause stress. Theories which explore concepts such as relationships and meaning tend to be ignored, as they position the individual worker as actively and psychologically engaging with their world as a whole, not as a dichotomy between the personal and work-related, and in particular not in a fragmented workplace.

In the following section the nature of the most prevalent risk associated with being a firefighter is presented. It is the 'illness' Post Traumatic Stress Disorder (PTSD), which employers are most concerned about and most likely to be sued for should it occur. This is followed by a detailed critical analysis of how the firefighters' reactions are constructed as a form of stress by means of a concept utilised by a particular model of support advocated to prevent PTSD occurring (Everly & Mitchell, 2001). The chapter proceeds to explore the psychological interventions recommended by the Everly and Mitchell's Model, (2001) particularly with regard to its efficacy in preventing PTSD, which is the primary reason for its utilisation within the Fire Services.

3.3 Trauma, Post-Traumatic Stress Disorder

One of the primary objectives for the management of Fire Services in Ireland is to protect the psychological health and safety of crew members and ensure that they are shielded from any adverse effects arising from their response to emergency situations. The very nature of a firefighter's work brings them into direct contact with people who are at their most vulnerable and distressed. They will encounter scenes of utter carnage where their job could be to gather what is left of human remains. Equally, they will encounter scenes of pure tragedy, where the consequences of the emergency can overwhelm an individual, family or community. In addition to all this, there may be situations where their own safety can be compromised.

The key issue in terms of this research is how these emergency situations are constructed by the Health and Safety practitioners on the one hand, and by the firefighters who deal with them in the course of their work on the other. The medical and psychological literature focuses its attention on the potential for individuals to experience a traumatic or stress response when exposed to emergency situations. The Health and Safety professional must listen to and take on board such a perspective. However, trauma is not a unified concept with clearly defined boundaries; rather it is a construct based as much on social practices as it is in any particular incident which causes it. Nor is PTSD –occurring after a person's experience of a traumatic incident - an unproblematic diagnosis. The integrity of the illness has been the subject of significant debate since its inclusion in the third edition of the Diagnostic and Statistical Manual (1970) in the United States post the Vietnam War (Brewin, 2003; Hunt 2010; Kirmayer, Lemelson & Barad, 2008; McNally, 2005; Burkett & Whitley, 1998; Young, 1997). In the next section both of these aspects will be explored from a conceptual

basis, as together they play a significant role in constructing the firefighter as a secondary victim of the emergencies they encounter, thereby warranting a series of psychological interventions to ensure that their psychological health is protected.

In determining the risk to the psychological health of firefighters, the type of psychological damage which has been postulated to arise from the work that they do is seen by the Health and Safety practitioners as emerging from the trauma which they are exposed to when dealing with emergency situations. The word trauma itself has been imprecisely borrowed from physical medicine where traditionally it refers to a wound or injury on the body. Within the psychological context however, the word has developed a more diffuse usage. Like the word stress, the word trauma has come to signify both the stimulus (the trauma of a car crash) and the resulting set of responses (the car crash was very traumatic for those involved).

Trauma, as a psychological concept, is not akin to trauma as a physical concept. To understand something as a psychological trauma requires a degree of social consensus both to recognise an event as being a potential source of trauma and to recognise the resulting responses as an illness. As Herman (1997) states:

> To hold traumatic reality in consciousness requires a social context that affirms and protects the victim and that joins victim and witness in a common alliance. For the individual victim, this social context is created by relationships with friends, lovers and family. For the larger society, the social context is created by political movements that give voice to the disempowered. The systematic study of psychological trauma therefore depends on the support of a political movement. (p.9)

Herman argues that trauma as a concept has become visible only three times in the last two centuries, and each time has been affiliated with a particular political movement – first with the study of hysteria in late 19th century France; then with the anti-war movement culminating in America's rejection of the Vietnam war; and more recently with the attention drawn by the feminist movement to sexual and domestic violence. Strongly couching her analysis within a psychotherapeutic framework Herman states that it is only when the alliance between investigators and patients are strong and powerful enough to "counteract the ordinary social processes of silence and denial" (p.9) can any real progress be made with the study of trauma.

There is much evidence to support Herman's thesis. Young (1997) explores how PTSD came to be recognised as a psychiatric illness and was included in the official diagnostic manual of the psychiatric profession - the Diagnostic and Statistical Manual 111, American Psychiatric Association, 1980 (DSM) - primarily due to the pressure of the anti-Vietnam war movement. The apparent epidemic of suicides, anti-social acts, alcoholism, drug taking, and bizarre behaviour exhibited by returning soldiers from the Vietnam war had to be explained and, more importantly, appropriate care, pensions and benefits needed to be provided for them. He argues that a failure by society to make a place for the care of these victims would in effect leave them unsupported and unprotected and be akin to blaming them for the misfortune which war placed on them. Society could, however, repay their debt to the bravery of soldiers by acknowledging that many of the social difficulties they experienced on returning after combat were as a direct result of the 'illness' they had innocently acquired through their exposure to combat. Young (1997) does not deny the reality of PTSD, but instead of viewing its origin within a traumatic event, and made real through the presence of various clinical signs and symptoms, sees its facticity as being a "historical product" (p.5) made real

through the various discourses and practices which give the very concept meaning within people's lives.

He states:

> The disorder is not timeless, nor does it possess an intrinsic unity. Rather, it is glued together by the practices, technologies, and narratives with which it is diagnosed, studied, treated, and represented and by the various interests, institutions, and moral arguments that mobilized these efforts and resources. (p.5)

Unlike biomedical diagnoses which are based on an underlying cause (the aetiology of an illness) and not on the presence of particular symptoms, psychiatry is based purely on the presence of particular symptoms with possible causes only being inferred. As Cooper (2005) argues, in spite of the continuing efforts of the psychiatric community to provide a nosology of the kinds of psychological problems which are regarded to exist, the epistemological assumptions implicit in such an approach are too "theory laden" (p.15) and flawed. She argues that, "as we have reason to doubt that the correct theories concerning mental disorders are known, we have reason to doubt that the conditions included in the DSM are natural kinds". (p.150)

Young (1997) further explores how the structure of the PTSD syndrome was constructed in a manner which would be most beneficial for those whom it was designed to protect. Central to the definition of PTSD is the aetiological event – the traumatic incident is its defining feature. It is only in the presence of the event that the symptoms derive their significance. He argues that:

> However it is obtained, evidence of a credible etiological experience transforms non-specific symptoms into tokens of PTSD. Ruminations that would otherwise indicate a mood disorder are now changed into "re-experiences"; behaviours that

> resemble common phobias are turned into PTSD "avoidance behaviour"; and episodes of irritability are defined as symptoms of "autonomic arousal". It is in this special sense, of investigating other symptoms with a degree of significance that they might not otherwise possess, that the etiological event is typical of PTSD. (p.120)

Other than substance related disorders (such as alcohol, caffeine, amphetamines, cocaine etc.) PTSD is the only psychological illness contained within the DSM (Diagnostic and Statistical Manual of Mental Disorders, American Psychiatric Association) which defines its aetiology as arising from factors external to the individual. All other psychiatric illnesses within the DSM are viewed as having their source within the individual themselves, be it due to a breakdown in biological functioning (bipolar disorder), developmental disorders (learning disorders), physical impairment (male erectile disorder), or social functioning (antisocial personality disorder). The traumatic event therefore attains a key clinical significance in determining how a set of thoughts, feelings and behaviours are to be interpreted. This essential criterion for a PTSD diagnosis is of the utmost significance when it comes to protecting the psychological health of firefighters. Every emergency situation they respond to can meet the criteria of being a traumatic event. The very nature of their work requires them to deal with traumatic events be it a house fire, road traffic accident, drowning, or a death by suicide. A firefighter's work meets the necessary criterion for a positive diagnosis to be given. As Bracken (2003) states:

> PTSD is one of the few psychiatric diagnoses where the aetiology is identified in the diagnosis itself. As such it brings to the fore the underlying assumptions about causality which operate in contemporary psychiatry and psychology. (p.75)

What constitutes a traumatic event has been revised over subsequent editions of the DSM itself, being broadened from an event which falls outside the normal range of human experiences and "that would evoke significant distress in almost anyone" (DSM 111) to encompass one in which both of the following factors are present:

(1) the person experienced, witnessed, or was confronted with an event that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others

(2) the person's response involved intense fear, helplessness or horror.

(DSM-IV, p.467)

Young (1997) criticises the 'event' as having a poor specificity, in that many people can be exposed to the same event yet few if any may proceed to develop PTSD. Yet there is a high degree of sensitivity built into the event as contained in the clinical definition – it is either present or it is absent, and the diagnosis of PTSD can only be made in its presence. McNally (2005) further criticises the centrality of the event within PTSD and finds the trend of extending the concept to everyday incidents as seriously undermining the integrity of PTSD. He views the liberalising of the definition of trauma as "an unintended consequence of peace and prosperity" (p.279), whereby events are elevated to the level of trauma which would not necessarily 'make the cut' in a time of war or social adversity.

Both Young (1997) and McNally (2005) draw our attention to the problems inherent in building a psychiatric diagnosis on the basis of a clinically necessary but highly constructed criterion. However, the problem is further magnified when that criterion is applied not just to the victim of the trauma but equally to those who witnessed or became aware of the trauma which had occurred to the other person, as set out in point (1) of the diagnostic criteria for PTSD (DSM IV). In effect this means that individuals

can be traumatised by an event, although they have not been the subject of the traumatic event themselves. Concepts such as the 'primary' and 'secondary' victim of trauma have been developed to position people in relation to the traumatic incident. A primary victim tends to be classified as one which is a direct casualty of the incident, while a secondary victim is any person who directly witnessed the incident - someone who came into sensory contact with the emergency through sight, hearing, touch, taste or smell. However, the boundary of what constitutes a victim is subject to ongoing revision. Gales et al. (2002) assessed PTSD victims according to their geographic location in Manhattan following the terrorist attacks in the United States on September 11, 2001. Their research suggested that those geographical locations were a good predictor of those most likely to experience PTSD and depression post-9/11. Further research by Neria et al. (2007) further extended the concept of victim to include those who watched the terrorist attacks live on TV, noting that even a number of years after the attacks they were likely to experience symptoms of complicated grief. The current DSM IV operates a broad definition of who may be a victim of PTSD or the type of event which may cause them to experience the illness. It states:

> Witnessed events include, but are not limited to, observing the serious injury or unnatural death of another person due to violent assault, accident, war, or disaster or unexpectedly witnessing a dead body or body parts. (p.464)

The significance of such a classification is immediately apparent for those working within the Fire Services who, as part of their job, will invariably encounter a number of those traumatic events. The clinical nosology is attempting not just to categorise the factors inherent in the illness or disorder, but equally attempting to position those who are likely to be its victims.

It is evident that the medical approach to trauma is in itself producing a number of problems which undermine the integrity of the PTSD as a clinical entity, for example, some events are already preconceived as being traumatic; the range of events which can cause trauma is continually expanding; the thoughts, feelings, behaviours of individuals are viewed through a normalising gaze and constructed as signs and symptoms of a clinical disorder; and the range of victims likely to experience these reactions is increasing from primary to secondary victims. As Carll (2007) highlights, trauma and being traumatised is a category which has been applied to a range of events as diverse as the 2001 attack on the World Trade Centre, politically motivated torture, kidnap, workplace violence, stalking, killing, war, large and small scale fires, xenophobia, motor vehicle accidents, anaesthesia awareness, AIDS, youth homelessness, violence against women, fender-benders, watching images of the destruction of the World Trade Centre on television, and overhearing jokes with a sexual content.

Hacking (2003) would argue that such "category creep" emerges because of a "looping effect" (p.34), whereby people as "interactive kinds" (p.31) can construct themselves and be constructed by the various subject positions available to them. Individuals can be classified, and classify themselves, in various other ways, as being of a particular 'kind' - be it man, woman, child, invalid, schizophrenic, traumatised - by virtue of the very existence of the category. Such a looping is an ongoing, active process whereby the individual both shapes the category and is shaped by their inclusion in the category. As Hacking states:

> Looping effects are everywhere. Think what the category of genius did to those Romantics who saw themselves as geniuses, and what their behaviour did in turn for the category of genius itself. Think about the transformations effected by the notions of fat, overweight and anorexic. If someone talks about the social

> construction of genius or anorexia, they are likely talking about the idea, the individual falling under the idea, the interaction between the idea and the people, and the manifold of social practices and institutions that these interactions involve: the matrix, in short. (p.34)

The question therefore emerges as to what meaning it has for firefighters to be constituted as being particularly vulnerable to experiencing themselves as PTSD. One of the most noticeable effects has been the development of an occupationally derived form of stress which firefighters can experience by virtue of the work they do. This stress – critical incident stress – has become the focus for mental health practitioners and Fire Services management, to ensure that the psychological health of firefighters is being protected. However, in this thesis, the concept of critical incident stress is viewed not as an illness of the natural kind, but as a construction which has the effect of pathologising people's normal reactions to situations which they are occupationally trained to deal with.

3.4 Critical Incident Stress

Critical incident stress (CIS), although not included in any of the recognised psychiatric classifications of mental illness, such as the Diagnostic and Statistical Manual (DSM-IV) or the International Classification of Diseases Revision 10 (ICD 10), has been presented by mental health practitioners in Ireland as the primary psychological risk facing firefighters in the course of their duty. The concept of critical incident stress first emerged in the United States of America and has primarily been jointly developed by Dr. Jeff Mitchell and Dr. George Everly (2001) to account for the reactions experienced by emergency service personnel (firefighters, police, ambulance drivers) in the course of their work. Essentially, Mitchell and Everly (2001) build their model of CIS

(commonly referred to as the Mitchell Model) on the assertion that individuals who experience events "outside the realm of human endeavour" (Mitchell & Everly, 2001 p.1) "risk traumatisation" (p.1). Their model proposes a program of interventions which "is specifically designed to mitigate and, if possible, prevent the development of dysfunctional and potentially disabling post-traumatic syndromes and stress disorders". (p.2)

Mitchell and Everly (2001) utilise medical concepts in constructing their model of critical incident stress. The physiological processes of stress as developed by both Selye (1976) and Cannon (1936) are used to provide a biological basis for the existence of critical incident stress and to demonstrate its universality. Their model follows the logic which states that:

(1) there exists a particular type of stress which people experience having encountered or been exposed to a 'critical' or 'crisis' situation
(2) left untreated this phenomenon may have profound adverse impact on individuals and may last until death
(3) particular occupational groups, by virtue of their role, are uniquely placed to be exposed to such situations
(4) by providing early appropriate intervention it is possible to 'treat' the immediate psychological crisis and reduce the possible onset of more serious long term psychiatric illness (such as PTSD).

Mitchell and Everly's model (2001) is premised on the notion that there are crisis or critical events which, by their very nature, cause a particular type of stress response, which they call critical incident stress. They define critical incident stress as being:

> …the stress reaction a person or group has to a critical incident. Critical incident stress is characterised by a wide range of cognitive, physical, emotional, and

> behavioural signs and symptoms. Most people recover from critical incident stress within a few weeks. (p.3)

Other than by reference to a critical incident, the concept of critical incident stress as developed by Mitchell and Everly (2001) relies solely on the model of stress as developed by Hans Selye (1976). The only difference is that their model refers to the stressor as being a "traumatic stressor" (Mitchell & Everly, 2001 p.51). However, their model refers to and interchangeably uses four different types of "stress" response which people experience after being exposed to a critical or traumatic incident (critical incident stress, critical incident stress disorder, post traumatic stress, and post traumatic stress disorder), but fails to provide any clear understanding as to the ways in which these phenomena differ from each other. Each form of stress is constructed by reference to the severity of the event which causes the stress in the first place. For example, their reference to and definition of traumatic stress bears a strong resemblance to their definition of critical incident stress as cited in the previous extract from their material – the only difference is how the event is categorised:

> Traumatic stress is the stress response produced when a person is exposed to a disturbing traumatic event. Traumatic stress may be thought of as a subset of critical incident stress (Mitchell & Bray, 1990; Everly 1995); the traumatic stress reaction may be immediate or delayed. (p.4)

In addition to their definitions of the forms of stress which an individual can experience after a critical incident, Mitchell and Everly (2001) further support their theory by referring to both PTSD (p.55, p.29) and Acute Stress Disorder (ASD) (p.34) paraphrasing and referencing the DSM-IV in each instance. This cross referencing provides a legitimacy to their four concepts of critical incident stress, however Mitchell and Everly (2001) do not attempt to map, correlate or draw comparisons between their own constructs and definitions with those contained in the DSM-IV. Their model

appears to speak of a new form of stress, and seeks to gain its legitimacy by indicating that there exists a biological basis for this stress, and that there is equal recognition within the medical discourse which acknowledges that a range of pathologies can exist when people experience such stress and do not receive appropriate interventions.

The primary difficulty with their concept of critical incident stress is that there is no empirical evidence to sustain the assertion that critical incident stress exists as a distinct entity. Epidemiological studies among firefighters have concentrated on looking at the prevalence of PTSD type symptoms. Recent research suggests that the prevalence of PTSD among police, fire and emergency services ranges from 6% - 32% (Javidi & Yadollahie, 2012), whereas studies by Corneil, Beaton, Murphy, Johnson and Pike (2012) suggest an incidence rate of between 7% and 37%. Attempting to reduce the prevalence of PTSD among firefighters has been the primary rationale for the provision of CISM intervention.

3.4.1 Critical Incident Stress Management Interventions

Constructing events within the medical idiom of critical incidents causing critical incident stress allows certain forms of questions and social practices to come into being, which is very much evident within the Mitchell Model. There emerges the need to control or manage the critical incident stress, to provide some form of treatment which is individual focused, and designed to help him or her deal with their own stress reactions. Mitchell and Everly (2001) state:

> The key to effective treatment is early aggressive treatment by a knowledgeable psychotraumatologist (i.e. a mental health professional) who has received specialised training in psychological trauma and who specialises in its treatment. Having said those words about treatment, however, there exists a compelling

> logic to aggressively pursue the prevention of PTSD and related syndromes. Peer counselling, crisis interventions, defusings and Critical Incident Stress Debreifings (CISD) are designed to prevent or mitigate PTSD and other stress related syndromes. These techniques can now be structured into a form of "psychological trauma and immunization programme". (p.40).

By utilising medical terminology throughout, the Mitchell Model positions the management of critical incident stress as a preventative measure – that left untreated the stress will develop or lead to "PTSD and other stress related syndromes" (p.40). Particular educational and quasi-therapeutic practices are therefore warranted which need to be conducted by specifically trained practitioners.

While CISM encompasses a range of educational and quasi-therapeutic interventions, by far the most important method within the model is Critical Incident Stress Debriefing (CISD). Mitchell and Everly regard it as being "one of the most important mechanisms to reduce the potential of post-traumatic stress disorder" (p.138). CISD is a group process designed to enable individual talk about thoughts, feelings and reactions to a critical incident in the presence of others who experienced the same incident. They summarise the process as follows:

> The CISD has seven phases. The structure allows participants in the group to discuss a traumatic incident in a controlled manner which does not leave them feeling out of control of themselves. The CISD uses some techniques common to counselling, but is not counselling nor psychotherapy nor a substitute for psychotherapy. One of the main components, which makes a debriefing different than psychotherapy, is the fact that a substantial portion of the debriefing process is dedicated to teaching the participants about their stress reactions. Stress survival techniques to manage traumatic stress are taught. (p.126)

The structure of the debriefing presents a number of problems for the researcher. Firstly, the process positions the firefighter as a secondary victim (emergency service personnel who witnessed or managed the traumatic event)" p.137, someone who is as much in need of help as the primary victim of the incident, be it a house fire, the car accident, the assault or rape. Such a positioning has, however, been alien to many of the firefighters which the researcher has worked with. Secondly, the debriefing imposes a structure on participants both in terms of how they are to participate in the debriefing (taking turns, suspending judgement, speaking about their thoughts and feelings). Individuals are not just encouraged to speak, but an unwillingness to either participate in the process or not to speak during it, carries with it various negative connotations.

3.5 The Efficacy of CISM Interventions

The efficacy of CISM interventions has been the subject of vigorous debate both within the academic literature and among practitioners. Lewis (2003) in an extensive review of the literature on CISM asserts that three distinct strands are evident: "Proponents of the intervention, critics of the intervention, and personal 'war stories' with no empirical data". (p.331)

The following process was used in undertaking a literature review regarding the effectiveness of critical incident stress management (CISM) and critical incident stress debriefing (CISD). First, the Researcher set out the criteria which were key to the research being undertaken and developed a list of terms which were specific to the research at hand. These included: critical incident stress management (CISM), critical incident stress debriefing (CISD), Jeff Mitchell, post-traumatic stress disorder (PTSD),

fire fighters, stress, occupational stress. The Researcher then conducted a number of on-line searches looking for references to recent articles and publications relevant to these areas. While the searches produced a combined total in excess of 800,000 “hits” not all of these were relevant, and only those which were deemed appropriate for the research were consulted.

A review of the psychological, medical and social science journals was conducted using the University of East London Athens account for access to PsychInfo and PubMed, databases, again using the search criteria outlined above. The results of these on-line searches produced a 98 articles only 11 of which were deemed appropriate on the basis that they specifically addressed the issue of the effectiveness of Mitchell type debriefing as applied to a population of fire fighters or emergency services personnel, and not on those studies which reported a variation of CISD.

A particular journal, The Journal of Emergency Mental Health was accessed as part of the literature review. Although this is a journal which specifically publishes research on mental health within the emergency services it is published by an organisation (Chevron Publishing) which has direct links with the CISM Foundation and therefore is considered by the Researcher to open to accusations of bias with regard to its research findings. Only one journal article written by Everly and Mitchell (2000) was included from this source.

The literature review was not contained to journal articles. A comprehensive review of the most recently published books either dedicated to or with chapters relevant to CISM/CISD and fire services or emergency services were read. These books were

identified using the ISBN (International Standard Book Number) data-base, a library search, and an online search.

The literature relating to critical incident stress is replete with methodological and conceptual shortcomings. While the difficulty in holding randomised controlled trials often prevents any clear evidence being established with regard to the efficacy of CISM interventions, a number of clinical studies and meta-analyses have been conducted, the findings of which can be summarised under 3 categories: (1) those studies which support the efficacy of CISM interventions (2) studies which indicate that CISM has no effect for participants (3) and studies which suggest that CISM can actually cause further pathology among participants.

3.5.1 Supportive Studies

Jenkins (1996) examined the effectiveness of critical incident stress debriefing among emergency response personnel following a mass shooting. The debriefing took place within the recommended guidelines of the Critical Incident Stress Foundation and self-report questionnaires were administered, exploring symptoms of anxiety and depression over two time periods. Her results indicate that at Time 1 participants of debriefing showed significantly fewer sign of helplessness and distress than a non-debriefed group. Furthermore, at Time 2, the participants indicated that engaging with the debriefing process had helped them cope more effectively with the incident, and they showed a greater decrease in anxiety compared with the non-debriefed group. Shortcomings to this study include the relatively small sample size (n=32), the lack of randomised assignment, and the lack of control for the existence of any pre-morbidity.

Leonard and Alison (1999) conducted a study with Australian police officers which assessed post-intervention outcomes between a debriefed group (n=30) and a control group (n=30). The researchers sought to match participants' experience of the incident across the two groups. Again, self-report questionnaires which explored participants' anxiety levels were administered with the results suggesting that those who had participated in the debriefing showed significant reduction in their levels of anger and they made greater use of positive coping strategies. The research showed up some further interesting findings. The feelings of the participants in the control group were negative towards their Department which in turn could account for some of their increased levels of anger. Furthermore, participants in the debriefed group reported that they did not deal any differently with the 'incident' as a result of the debriefing.

The research on the effectiveness of CISD has had greater success when its focus is shifted away from purely clinical concerns (such as anxiety, depression and coping) and focused instead on wider psychological factors such as degree of satisfaction, meaning-making and stress management. Tuckey (2007) sought to explore participants' level of satisfaction with the process, particularly when it incorporated a debriefing component. The findings suggest that participants were generally positive with regard to their experiences, and in particular appreciated the normalising of their own responses and reactions through open discussion with others. Plaggemars (2000) reported that allowing workers an opportunity to debrief following the suicide of a client or colleague provided a greater opportunity for meaning-making among colleagues. In a further study Tuckey & Scott (2013) utilised a randomised controlled methodology and particularly explores the effectiveness of group CISM support (as distinct from one-to-one interventions). Their study indicates that while group CISM can be associated with

less alcohol usage post-intervention, there was no significant effects on post-traumatic stress or psychological distress.

Jeanette and Scoboaria (2008) explored firefighters preference for different types of psychological support available to them. Firefighters were offered a range of supports including critical incident stress debriefing, individual debriefing, informal discussion and no information being the various support options available to them. They were furthermore asked to select them in relation to the types of "critical incidents" which they had encountered. The study found that individual debriefing was preferable for low intensity incidents, whereas group formats were preferable in instances where the incident was of more significance. Overall, the study highlights that while no one size fits all, there is a need to "mark" or provide a meaningful opportunity for firefighters to discuss and acknowledge their experiences in the aftermath of an incident.

3.5.2 Unsupportive Studies

Harris, Balogulu and Stacks (2002) conducted a three year study on the effectiveness of CISD as a post-incident intervention among 1,747 firefighters in the United States. Their objective was to evaluate the relationship between CISD and a wide range of mental health issues including PTSD, depression, anxiety, coping strategies and resources. Of the 660 responses received, 264 had attended one or more CISM interventions, and the remainder (n=396) had not. All subjects received a self-report questionnaire over a single session. The results indicated that there was no significant difference found on any of the measures between the two groups. There was no relationship found between CISD and PTSD. The researchers concluded that there was no evidence to suggest that a direct relationship between participating in a debriefing and subsequent coping ability or post-incident stress existed. However, the

methodological flaw inherent in the study is that the researchers failed to control for time, specifically the time period which elapsed between participants' experiences of a critical incident and the subsequent receipt of debriefing, or the time between the debriefing and their study. Participants' scores may have been related to the amount of time which had passed after the incident.

Carlier, Voerman, and Gersons (2000) undertook some comprehensive research with police officers in the United States, offering debriefing and some psycho-education at different time periods following a critical incident – 24 hours, one month, and six months later. While they were unable to randomise participants owing to police standard operating procedures, they were able to form a control group of officers who had experienced a critical incident prior to the introduction of CISD interventions. They were in a position to obtain some data on this external control group (n=75) by virtue of some previous research they had conducted with them. They compared this group with both a group of officers who had been debriefed (n=86) and a group who had declined debriefing (n=82). They used self-report questionnaires which sought to establish the extent to which a range of mental health issues was evident (including PTSD, anxiety disorders, and peri-traumatic dissociative experiences). Researchers who were blinded to the participants' membership of the respective groups administered the questionnaires before the intervention, at 24 hours, and six months later. The results suggested that at no stage was there any difference in symptomology between the groups. Furthermore, there appeared to be no difference in trauma-related symptomology between those who had experienced greater exposure to the critical incident. While those participants in the debriefing did report a higher degree of satisfaction with the intervention, there was no evidence to suggest that such satisfaction was related to a reduction in reported symptoms.

The National Institute of Clinical Evidence (NICE) in the United Kingdom conducted a further meta-analysis of the research in order to provide best practice guidelines to practitioners. While their review of the literature adopted the same level 1 research criteria as utilised by the Cochrane Report researchers (Rose, Bisson, Churchill & Wessley, 2009) and the National Institute for Clinical Excellence guidelines go further in actually stating that debriefing should not be used as an intervention for an individual who has experienced a traumatic incident. The report states:

> For individuals who have experienced a traumatic event, the systematic provision to that individual alone of brief, single session interventions (often referred to as debriefing) that focus on the traumatic incident, should not be routine practice when delivering services. (NICE Clinical Guideline 26, 2005 p.4)

The clinical guideline as advocated by NICE, is that a period of "watchful waiting" (p.4) should follow immediately after a traumatic incident. Where there is no improvement in symptoms after 4 weeks, a course of trauma-focused cognitive behavioural therapy (CBT) or eye movement desensitisation and reprocessing (EMDR) is recommended. They conclude that single session debriefing should not form part of standard care.

3.5.3 CISM Interventions Causing Further Pathologies

Although not conducted with a population of emergency responders, one of the most widely cited research studies on the lack of effectiveness of CISM is that conducted by Bisson, Jenkins, Alexander and Bannister (1997) primarily because it is one of the few randomised control trials on CISM in existence. Working with a group of burn victims in a hospital setting they randomly assigned participants (n=57) to a debriefing group,

and others (n = 46) to a control group. They adhered to Mitchell's guidelines and protocol with regard to conducting a debriefing. The subsequent follow up conducted three months later suggested that there was no difference in symptomology between the two groups. However, at 13 months higher PTSD rates were evidenced in the debriefed group – they reported higher levels of anxiety, along with higher self-reports of PTSD. While the researchers could not conclusively conclude that those who had been debriefed were made to feel worse by virtue of the process itself (and not as a result of more severe injuries) they did recommend that debriefing should be discontinued.

McNally, Bryant and Ehlers (2003), prompted by the 9/11 terrorist attacks in New York, comprehensively evaluated the research on early psychological intervention as a way of promoting recovery from post-traumatic stress. Having conducted an exhaustive review of all the available studies on CISM the researchers concluded that not only could they not substantiate the effectiveness of psychological debriefing, but there is evidence to suggest that "it may impede natural recovery" (p.72).

Two significant meta-analyses of the CISD research have further served to question the effectiveness of the intervention in terms of preventing the development of psychopathology. The first such meta-analysis, in the Cochrane Report, (Rose, Bisson, Churchill & Wessley, 2009) states that:

> Single session individual debriefing did not prevent the onset of post-traumatic stress disorder (PTSD) nor reduce psychological distress. At one year, one trial reported a significantly increased risk of PTSD in those receiving debriefing. Those receiving the intervention reported no reduction in PTSD severity at 1-4 months, 6-13 months or 3 years. There was also no evidence that debriefing

> reduced general psychological morbidity, depression or anxiety, or that it was superior to an educational intervention. (p.4)

While unequivocal in its tone, the Cochrane Report has been criticised by those within the CISM community for its apparent failure to grasp that debriefing is a group rather than an individual process, and for its strict adherence to evaluating studies which only meet level 1 research criteria and to what Regel (2007) refers to as the 'hegemony' of randomised controlled trials. Regel further draws our attention to the fact that the Cochrane Report specifically excluded 19 studies due to "methodological shortcomings", in particular the lack of randomization. However, as Regel asserts: "These included many RTCs of group debriefing in naturalistic settings, for which PD (psychological debriefing) was intended". (p.414) Furthermore, from the perspective of this research two problems emerge with regard to its findings. First, the report sought to evaluate the suitability of single session debriefings primarily within clinical settings and with "primary" victims of trauma (survivors of road traffic accidents, burns victims, mothers in childbirth). It did not address the suitability of single session debriefings within an occupational setting and with groups of Fire Fighters. Only one reference was made in the report to a piece of research relating to Fire fighters and this research was, in fact, excluded from the review. A second problem with the findings of the Cochrane report is that the Mitchel model itself never intended debriefing to be a "stand alone" intervention, but instead needs to considered as part of an overall critical incident stress *management system.* So the applicability of the Cochrane report findings to population of fire fighters could be regarded as being limited.

Patterson, Whittle and Kemp (2014) reported the adverse impact of specific aspects of Mitchell model debriefing on event recall and psychological wellbeing. They randomly allocated participants to either emotionally focused or fact focused debriefings and

concluded that those exposed to fact based debriefings tended to incorporate more misinformation into their recall and also reported more intrusive thoughts; whereas participants who received more emotionally based debriefing reported more confabulated items and more intrusive thoughts. While the population used for this study involved college undergraduates the study raises concerns with regard to the use of debriefing with fire fighters. It suggests that the actual stages of the debriefing process itself may have an adverse impact on individual recall and emotional wellbeing.

3.5.4 The Critical Incident

If, as the Mitchell Model suggests, critical incident stress exists as an entity in the world, then it can only do so in the presence of a particular type of incident which caused the stress response to occur in the first place. This incident which causes the stress response is of central importance to the Mitchell Model – otherwise the model would fail to have any internal coherence as a particular type of stress. While Everly and Mitchell (1995) do argue that incidents occur which cause the stress response to occur, what actually constitutes a critical incident can only be identified *post hoc*, on the basis of an individual exhibiting a particular type of critical incident stress. They define a critical incident as being:

> …a stressor event (crisis event) which appears to cause, or be most associated with, a crisis response; an event which overwhelms a person's usual coping mechanism (Everley & Mitchell, 1999) (op cit). The most severe forms of critical incidents may be considered traumatic incidents. (p.3)

The matter is further complicated by the introduction of the concept of trauma into their work. Mitchell and Everly (2001) define trauma as being both an event which is outside the normal realm of human experience and as being a subsection of critical incidents.

It is evident that within the Mitchell Model the concept of the critical incident is a poorly defined and a circular one. They describe it as being both big enough to overwhelm human coping mechanisms, yet at the same time not big enough to be traumatic. The incident is now constructed in medical terms – as a specific type of incident which inherently has the capacity to produce a specific type of stress response.

3.6 Alternative Constructions of PTSD

As explored in section 3.5. the construct of the critical incident is primarily rooted in a medical model of stress and trauma, which seeks to pathologise or normalise individual responses in accordance with the model, frameworks and precepts of PTSD and CIS.

There are, however, other theories which construct alternate understandings of the relationship between the individual and the traumatic events which they encounter. The psychiatrist Patrick Bracken (1998) outlines a construction of trauma and PTSD which is based in post-modern understandings of the loss of meanings and grand narratives in western democracies. He argues that:

> If we accept that human reality is a shared reality and not something generated within individual minds then it is reasonable to expect that different social and cultural contexts will produce different ways of thinking about and experiencing emotional states, different sorts of vulnerability and different ways of

> responding. My suggestion is that contemporary Western, postmodern societies have a particular vulnerability with regard to meaning, order and purpose. The move away from grand narratives has been both a liberation and a curse. (p.189)

Essentially, Bracken argues that the loss of meaning is not to be found within the individual but within a social and cultural context. While society has gained from the benefits of humanism and the Enlightenment in creating an understanding of the individual as free, and of the power of reason to solve the problems which face humanity, the individual equally has been left lost, and isolated and increasingly insecure. The response from mainstream psychiatry, he argues, has been within the vein of the Enlightenment, to find better ways of identifying various forms of illness and then to develop more effective technologies for assessing and treating the individual.

Bracken (1998) suggests the adoption of a post-psychiatric stance in challenging the assumptions implicit in psychiatry when exploring an issue such as trauma. Firstly, he suggests that by attending to ethical issues which prioritise values over science, there will open up a better means of engaging with the problems which psychiatry identifies. When dealing with the issue of the psychological well-being of firefighters, reframing the question in the light of values rather than what science tells us enables us to search not just for better interventions but challenges the practitioner to attend to issues of the meaning, and the value, of the 'shouts' of the firefighters. Immediately a richer psychology emerges, which is rooted in and calls attention to the experiences of firefighters.

Secondly, Bracken's post-psychiatric approach calls for "a move towards contextualist understanding and practice" (p.198). Essentially, he is advocating less of an internalist approach in responding to trauma, and posing a critical question for the practitioner:

> If the meaningfulness of the world is not given by the structures, schemas or programmes of individual minds but by the practical engagement of human beings with their social and cultural environment, should we look to individual talking as the solution when problems of meaning arise. (p.211)

Rather than attuning to the words, concepts and values of the expert, Bracken's approach suggests that we as researchers need to pay greater attention to the values, relationships, context, language and environment of firefighters as they themselves make sense of their own experiences of the work that they do.

3.7 Alternative Forms of Intervention

The Mitchell Model of CISM (2001) still remains the dominant form of psychological support provided to members of the Fire Services in Ireland, in spite of the inconclusive evidence regarding its effectiveness. There is no alternative cohesive model utilised by Irish practitioners. While the concept of Psychological First Aid (PFA) has been utilised as a means of providing immediate psycho-education to fire crews after problematic emergency situations, its primary function is to introduce members of the Fire Service to the counsellor or psychologist who is providing Employee Assistance support to the Fire Service. Practitioners may use the meeting as a means of providing minimal direct intervention yet identifying those individuals who may be in need of further psychological support.

Psychological First Aid was initially developed in 2006 in the United States by the national centre for PTSD in association with the National Centre for Child Traumatic Stress Network (NCCTSN). As Uhemik and Husson (2009) outline, PFA incorporates a number of key concepts into its model differentiating it from the current CISM model.

PFA does not attempt to prevent PTSD but instead seeks to help people access practical resources within themselves, the family, their community, and their colleagues which will help sustain them in the aftermath of a crisis situation. The model includes concepts such as individual and community resilience, and places a high value on cultural sensitivity towards those affected. It acknowledges the fact that the vast majority of people do not go on to develop PTSD after experiencing a traumatic incident.

Philips and Kane (2006) have developed a set of guidelines for counselling practitioners working with first responders such as firefighters. In comparison with the Mitchell Model (2001) they suggest that any intervention must start by acknowledging the characteristics of the first responders – the importance of the 'mission' (i.e responding to an emergency call out), their brotherhood mentality, and that they as practitioners will be viewed as outsiders. There is, however, little published evidence regarding the efficacy of PFA. Forbes et al. (2011) propose a multi-phased evaluation process which is not just based on looking at post-intervention effectiveness but also at integrating organisational, community and environmental contexts when assessing the impact of psychological first aid. Currently no fire service in Ireland provides PFA to its members.

3.8 Conclusion

The research on the effectiveness of CISM could at best be described as ambiguous. While at an intuitive level the notion of providing early psychological debriefing sounds appealing, the evidence is not there to confirm its effectiveness as a therapeutic process. Furthermore, continued usage of it in the face of such equivocal evidence may in fact

leave a practitioner and employer open to litigation in failing to provide an appropriate standard of care.

This still leaves the management of the fire services with a problem – how can they support the psychological health of the employees and adhere to their duty of care obligations? Are there steps which the organisation can take which safeguard the psychological well-being of Firefighters in the face of the emergency situations which they encounter?

There have been some hints made in the review of the literature. Maybe the first step should be to explore firefighters' own experiences of how they deal with the emergency situations they encounter. Rather than starting with illness-based concepts such as stress, trauma, and PTSD perhaps the way forward is by exploring how firefighters see themselves engaging with the tragic situations they encounter. On that basis, it may be possible to develop a model of support which is anchored not just in the models and precepts of occupational psychology, but is influenced by firefighters' real constructions of themselves and the work they do.

The research in Chapters 4 and 5 aims to understand how firefighters themselves discursively construct their experiences of the emergency situations that they encounter. To date, the primary voice heard in the debate has been that of the Health and Safety professional or the occupational psychologist, both informed by, and trained in, the models of stress. By exploring the constructs drawn upon by firefighters themselves it is hoped that other factors emerge which will inform future models for the psychological preparation, care and well-being of fire crews.

CHAPTER 4

QUALITATIVE STUDY - INVESTIGATING FIREFIGHTERS' CONSTRUCTIONS USING DISCOURSE ANALYSIS

"A question I would be asking is 'how did we deal with this before all this came up'?"
(Quote from transcript)

4.1 Introduction

The overarching concern with the research into critical incident stress management (CISM) has been with regard to determining its effectiveness (Devilly, Gist, & Cotton 2006) as a means of preventing firefighters from developing serious long-term psychiatric problems in the aftermath of experiencing a critical incident. The Mitchell Model proposes that the reactions of firefighters constitutes a specific form of stress that, if left untreated, can develop into more serious and long-term psychiatric difficulties. It recommends a number of CISM interventions to help reduce the likelihood that long-term psychiatric illness will occur. The vast majority of all subsequent research has focused on evaluating the effectiveness of CISM, and of one component of it in particular, the single session group intervention called a debriefing. As has been seen in section 3.5, the research is largely inconclusive (Blaney, 2009).

While acutely cognisant of the significance of providing only those interventions that can be shown to work, this research approaches the matter of how Occupational Psychology can adopt a critical perspective regarding the support given to the psychological health of firefighters. The first part of that process has been achieved in

Chapter 3 whereby the concepts that underpin the illness-based approach of the Mitchell Model (2001) have been critically evaluated. Just as stress as an integrated concept is of questionable validity (Dewe & Cooper, 2012), and this research has shown that many of the concepts contained within CISM (e.g. the critical incident, and critical incident stress) do not possess a coherent ontology, so it is time to equally question the concept of critical incident stress as an occupationally related illness.

The critical reading of the psychology of CISM in Chapter 3 further opens up the realisation that by focusing on questions of effectiveness the existing research is ignoring a key point - what is the CISM model actually doing to how firefighters experience themselves and the work that they do? The quote used at the top of this chapter encapsulates the issue very succinctly. The participant asks "how did we (the firefighters) deal with all this (their critical incident stress) before all this (the interventions and techniques provided by CISM) came up". The comment illustrates a shift in subjectivity that was produced by the CISM model. Using discourse analysis this chapter probes questions such as this, and the insights they produce, further. It seeks to identify the various discourses which participants draw upon when constructing their experiences of emergency situations, of themselves as firefighters, and their own coping and support. The insights gained will be used in the development of a support model that is based on constructs which are meaningful for firefighters.

4.1.1 Objectives of the Current Research

This research has a very clear purpose. It seeks to understand how the core aspect of a firefighter's work, namely the provision of emergency support to individuals in crisis situations, is constructed by members of the retained Fire Service in Ireland. In so doing it seeks to deconstruct their experiences and to position these deconstructions in

comparison to/alongside those constructions which are imposed and privileged by the Mitchell Model. To do this effectively the research has to explore four key questions:

(1) How are firefighters themselves constructing the critical incident?

The concept of the critical incident is not indigenous to fire crews in Ireland – it is a term which has emerged by virtue of the Mitchell Model. Underpinning the Mitchell Model are the assumptions, theory and language of the disciplines of psychiatry and medicine. The above question works with no such assumptions. Instead it seeks to explore how firefighters themselves construct the 'shouts' (i.e. emergency call-outs) that they respond to, including those, which to an outsider, appear gruesome and tragic or stressful.

(2) How are they constructing their own reactions to the critical incident?

The Mitchell Model is based on the notion that there exists a particular type of stress which individuals experience as a result of being exposed to a critical incident. Rather than seeking to verify positivist notions of whether or not firefighters are stressed as a result of their work experiences, this question seeks to explore the ways in which the firefighters themselves make sense of their own experiences of the emergency situations they encounter. How are they constructing their reactions? Are they experiencing a reaction which could be described as critical incident stress?

(3) How are the participants constructing themselves as firefighters?

Firefighters do a job. Their exposure to and experiences of critical incidents come about by virtue of the occupational position they hold. The Mitchell Model positions the firefighters as 'secondary victims' by virtue of their being in the presence of, and directly witnessing, the effects of the emergency situations they respond to. This question seeks to explore how firefighters discursively construct themselves and the

work they do. It asks if such a positioning by the Mitchell Model is warranted, or whether the subjective position of the firefighters is different from that of secondary victim.

(4) How are they constructing an appropriate intervention?

The primary objective of this research is to ensure that an appropriate form of support can be provided to fire crews which will meet with the needs of the individual and the organisation. To date, such support has been constructed by reference to the stress which firefighters experience arising from their exposure to critical incidents. However, if firefighters use discursive formations which construct themselves and the work they do in ways which are substantially different from that of secondary victim, then the form of support provided needed has to be re-evaluated.

These questions, separately and combined, aim to explore the relationship between the firefighter, the work they do, and the support which will be provided, in a substantially different way from the research which aims to prove or disprove the effectiveness of the Mitchell Model. It moves beyond essentialist views of firefighters as either heroes or victims, and explores how their experiences can be discursively constructed to provide a variety of subject positions beyond that of the stressed firefighter.

4.2 Methodology

4.2.1 Participants and Recruitment

This study was conducted with the assistance of the largest retained Fire Service in Ireland. In locations where it is not feasible either economically or operationally to maintain a full time fire crew to serve the emergency needs of rural communities, individuals living and working within the locality are retained by the Fire Service to be ‘on-call’ to respond to emergency situations when and where they arise. These

individuals and crews are trained in, and equipped to, a level whereby they are able to provide a full range of fire fighting and emergency response duties, and they can be required to be present at a wide range of emergency situations including: road traffic accidents (RTA); domestic, commercial and scrubland fires; body retrieval (drowning, suicides); and gas or chemical leaks and explosions. These retained fire crews, which usually consist of a Station Officer, an Assistant Station Officer, and individual firefighters, are equally required to engage in ongoing scheduled training exercises, and their on-call roster can extend to them being available to respond to emergencies 24 hours a day, seven days a week, unlike full-time firefighters who work a defined number of shifts in accordance with the shift pattern within their Fire Service.

Permission to have access to these fire crews was granted by the Chief Fire Officer from the participating Fire Service, with the Assistant Chief Fire Officer (ACFO) providing the researcher with a list of potential fire crews to engage in the research. Participant crews were chosen by the ACFO on the basis of geographic spread through the region covered by the Fire Service, in an effort to provide the researcher with access to crew members with as wide a variety of firefighting and incident response experiences. The Station Officer of each of the nominated fire crews was then contacted by the researcher, initially by telephone, followed by a written outline of the research sent to them by post (Appendix 2). The Station Officer discussed the planned research with their crew and once agreement to participate in the study had been obtained from them, the researcher arranged to travel to conduct a group discussion during one of their scheduled training sessions. All discussions were held in the crew's Fire Station.

As the researcher wanted to ensure that each member voluntarily participated in the discussions and did not do so on the basis of any overt or implied pressure or sense of

obligation to either the other crew members or to the researcher himself, he sought to address the issue by means of a number of different methods. Prior to the commencement of the discussion each participant was given a Participant Consent Form which they were asked to read and sign (Appendix 3). In addition, the researcher had agreed in advance with both the ACFO and the Station Officer that some training activities would be available on the evening of the discussion so that individuals could participate in an alternate activity if they so wished. In a further attempt to highlight the voluntary nature of their participation, the researcher reminded the participants at the start of the discussion that their participation had to be voluntary, that they were free to withdraw at any stage, and that they could have their contribution withdrawn right up to the point of final submission of the written thesis.

Seven fire crews participated in the study out of a total of 21 fire crews within the geographic region covered by the Fire Service. A total of 89 individual firefighters participated in the discussion groups (86 male, 3 female) with a typical group size consisting of 11 to 14 participants. The discussions were held at one of their training sessions and consisted of all the crew members who had attended for training that evening. The age range extended from 24 to 55 years, with the mean age being 36. Participants were predominantly male (n= 86) with three female crew members. Such a variation in gender is in keeping with the overall gender make up of fire crews within the retained service. The mean length of service of the participants was 14 years.

4.2.2 The Researcher

The researcher is a 49 year old male occupational psychologist with his own consulting firm providing Employee Assistance Programmes (EAP) to client organisations throughout Ireland. For over ten years I have-been directly involved in developing and

implementing Critical Incident Stress Management (CISM) programmes to a number of retained and full-time Fire Services. Such programmes provide multi-level education training and psychological debriefing services to individual firefighters and fire crews in dealing with the potential psychological impact of the incidents they encounter in the course of their work. Our programmes are purchased by Fire Services, as all employers are required by law to ensure that no aspect of the working environment can cause either physical or psychological damage to their employees. Where a risk is foreseeable, all employers have to ensure that appropriate systems are in place to both minimise the risk and to safeguard the well-being of the employee. My company has been providing a CISM programme to the participating Fire Service for over 15 years, although another psychologist from within the team was leading and delivering the programme at the time the research was undertaken.

The underpinning of the researcher's own theoretical framework has, in the past, been largely derived from an experimental perspective as an occupational psychologist. I viewed post-traumatic stress disorder and critical incident stress as defined psychiatric problems, each having a clear and distinct ontology, and with universal applicability (Latour,1999). As a scientist-practitioner, I had previously, through my company, commissioned some research (Engerer, 2004) on the effectiveness of the interventions and supports which my company provided to fire crews, which in itself served as a means of promoting the value of CISM to potential clients within the Fire Services.

The present research stemmed from my own personal experiences of providing CISM interventions to fire crews. Through these contacts I became aware that firefighters' experiences of, and responses to, incidents were not in keeping with those as set out by the CISM model. I recognised that exposure to the most gruesome of incidents did not

necessarily result in firefighters reporting a ‘stress-like’ or a ‘traumatic’ response. On exploration, many of the incidents, which to an outsider might have appeared ‘traumatic’ were not constructed in that way by the fire crews themselves. Furthermore, I became concerned that in a number of instances firefighters who had participated in the CISM interventions were re-evaluating their own reactions and responses in accordance with the signs and symptoms of stress as set out in the de-briefing intervention provided. Some firefighters began to question whether their own response was normal or not. Other participants appeared uncomfortable with the structure of the intervention itself – speaking in the presence of a psychologist, admitting their thoughts and feelings in the presence of their colleagues, or afraid of becoming visibly upset and becoming the focus of unwarranted attention.

Finally, I became acutely aware that many of the informal social supports and mechanisms which the fire crews used to support each other both during and after an incident were being questioned and re-evaluated in light of the professional support which was now being made available to them. The value of going for a meal or a drink after an incident was being questioned or made irrelevant in light of the ‘correct’ activities of the CISM model. They sought my official approval or sanction that such socializing actions were of value. How they engaged with each other both during a ‘shout’ and informally in the aftermath of an incident, was now appearing to be informed by the language and concepts of stress. They began to look at each other in a different way, and to be vigilant for the ‘signs and symptoms’ of stress in each other. It was apparent to me that the participants’ confidence in their own personal and crew processes and activities were being questioned in light of the presence of a mental health ‘expert’.

Over time, I began to question both myself as a practitioner and the CISM model. I became conscious of what I (and the model) was doing during these debriefing sessions. I became aware of how my intervention, although well intentioned, was fundamentally changing how participants viewed themselves, how they engaged with each other, and how they were now being encouraged to identify a new set of psychological dangers in the work that they were doing. This bothered me greatly and led me to undertake this research.

4.2.3 Ethics

Ethical considerations were to the fore at each stage of the design and implementation of the study. Prior to engaging in the research, full ethical clearance was obtained from the Ethics Committee of the University of East London (Appendix 4). A copy of this ethical clearance was presented to and discussed with the management of the Fire Service as part of the process of seeking their support for the study.

Consideration was given to the potential health risks arising for individuals from their participation in the study. The only foreseeable risk was the possibility of individuals becoming upset by virtue of discussing their experiences of traumatic situations. It was felt that such a risk could be managed on an immediate basis by the researcher who is an experienced critical incident stress counsellor, and on an ongoing basis by means of the network of counsellors and psychologists retained by his firm.

Ethical consideration was equally given both to the recording of the discussion groups and to the treatment of the subsequent transcriptions of these recordings by the researcher. As confidentiality was a primary concern, only the researcher had possession of the recordings throughout the process. He typed and checked for accuracy

each transcription within 2 to 3 days of the discussion group taking place. Each recording was then deleted to prevent recognition of participants' voices. To ensure that, on reading a transcript, no third party could directly or indirectly attribute any comment to a particular individual or fire crew, a method was utilised by the researcher whereby alpha-numeric codes were allocated to each individual participant and fire crew. In addition, any identifying remark such as a reference to a person or town or incident by name was abbreviated to an arbitrary alphabetic initial. Finally, transcriptions were then taken back to the respective fire crew for their review. Each member of each participating fire crew was given a copy of the transcript of their own respective crew's discussion, which they were asked to review there and then in the presence of both the other members of the crew and the researcher. So as to protect the confidentiality of the group, each copy of the transcript was collected at the end of the review session and was shredded by the researcher on return to his office.

4.2.4 The Discussion Groups

Each discussion commenced with the researcher giving an overview of the purpose of the research, the method being used to gather insight into the firefighters' experiences, and the reasons why the researcher had chosen this particular area of study. During this introduction the researcher equally discussed the ethical boundaries of confidentiality placed on him in his role as researcher, and he sought and obtained consensus from each crew member that they would not disclose any information which arose during the discussion with any non-group member.

As each discussion was to be recorded by means of a digital recorder with two microphones (both inbuilt and extension) the researcher outlined the procedure he was going to follow to ensure that individual and collective identity was not disclosed either

directly or indirectly by either the recording or transcription process. In addition he sought assurances from each of the participants that they were comfortable to participate in the discussion in the presence of the recording device. Once a verbal assurance was given by each participant the recording of the discussion commenced.

At the outset of the discussion, participants were encouraged to identify those questions or topics they believed should be explored during the discussion. In addition to these the researcher, during the course of the discussion, introduced a number of topics which were primarily informed both by his previous training and experience of working with fire crews in the aftermath of a emergency situations, and theoretically driven by his critical reading of the relevant theories on Post-Traumatic Stress (Diagnostic and Statistical Manual 3rd ed. 1980) and on the Mitchell Model of CISM (Everly & Mitchell, 2000). Such topics included exploring firefighters' individual and collective responses in such situations; what impact if any such situations might have had on them; the methods they used in dealing with any impact; and the view they had with regard to the current CISM programme. As this programme was being provided by the researcher's organisation and as a number of members of the fire crews may have availed themselves of the various initiatives provided by his colleagues, the researcher was acutely aware that participants might be reluctant to give an honest account of both their responses to incidents and of their experiences of dealing with the CISM programme. He endeavoured in a number of statements and on a number of occasions during the group discussions to make it clear as to the necessity of being open and forthright in contributing their experiences, if the research was to be an effective means of identifying ways in which firefighters constructed their experiences of critical incidents.

Each discussion lasted between one hour and one hour and twenty minutes. At the end of each discussion the digital recorder was switched off, and participants were asked to complete their Research Consent Form along with a Biographical Details Form (Appendix 3). The session ended with an informal discussion and debriefing regarding how they felt it had gone, and their views on how it was conducted. All participants reported enjoying the experience and many expressed their appreciation at being invited to participate. No individual reported an adverse response to the experience itself or expressed any concerns that the experience was not worthwhile.

4.2.5 Transcription

The digital recording of each discussion group was transferred into a printed word format. The printed transcripts were produced by means of the researcher repeatedly listening to each recording, typing the dialogue word for word, and listening back to each recording from beginning to end while reading each transcript to ensure accuracy. A transcription code which stressed readability was utilised from Malson (1998) a copy of which is contained in Appendix 5.

4.2.6 Analysis

As the research sought to explore how firefighters themselves constructed their experiences of dealing with the incidents they encountered during the course of their work, the transcription of each discussion group was interrogated from a discourse analysis perspective. Such an approach is "concerned with elucidating the ways in which discourses constitute and regulate particular (discursive) practices, experiences and subjectivities" (Malson, 1998 p.42).

For the purpose of this research all the transcripts were read through a number of times. They were then physically disceted, photocopied and arranged into soft bound copies each copy relating to a particular research question. These copies were then read through again highlighting those sections of the text which appeared to speak to the question being investigated. The text was analysed using a six-stage process for conducting a discourse analysis as outlined by Willig (2008). An example of the Researcher's notes is contained in Appendix 6.

The first step in the process involved reading each transcript through a number of times, examining how participants constructed the discursive objects which were being explored by the research. For example, one of the research questions considered how participants constructed the critical incident. In this first stage of the discourse analysis, all extracts from the text which related to the critical incident were highlighted by the researcher. As Willig (2008) recommends, both the explicit and the implied references to the critical incident were included, as it is the meaning of the extract rather than its direct reference to a critical incident which was being sought. Participants therefore may have referred to the critical incident in a number of different ways, such as a 'shout' or a 'call', and each was included in this step of the analysis.

The second stage of the process involved looking at the various constructions of the discursive object highlighted in the text. Again, using the example above, all the extracts relating to the critical incident were analysed to identify the number of ways in which it was being constructed by participants. This enabled the constructions to be located within wider discourses, for example, the critical incident could be constructed through an emotional discourse with reference to its sadness; or through an occupational

discourse by looking at the critical incident as a job to do. Thus the critical incident can be seen as both an occasion of sadness and as a job to do within the same text.

Willig (2008) refers to the third stage of her process as that of "action orientation" (p.116). Essentially, at this point a closer analysis of the text was undertaken by the researcher to identify what purpose the construction served at this particular point. In effect the researcher asked the question, what was to be gained or achieved by constructing the object in this way at this time? For example, constructing the critical illness as a source of sadness, allowed the participants to display that they did respond emotionally to situations, and enabled them to account for the wider range of feelings which they experienced including those (such as humour) which could be considered inappropriate by a non-crew member.

The fourth stage of the discourse analysis involved exploring the subject positions which the various constructions offered. Discourses construct not just a discursive object but also allow for subject positions to be assumed by virtue of the constructions. The discourse allows the speaker to position themselves and others through the use of the discourse itself. As can be seen in Appendix 6 participants discursively construct the incident as a "puzzle" to be solved. Such a construction positions the speaker in the role of someone whose job it is to solve the puzzle – they are a problem solver, someone who works out what is wrong and what needs to be done to make it complete.

The fifth step in the process involved exploring the relationship between the discourses utilised and the practices which those discourses either opened up or closed off for subjects. As Willig (2008) outlines: "By constructing particular versions of the world, and by positioning subjects within them in particular ways, discourses limit what can be

said and done". (p.117). Continuing with the "puzzle" reference as introduced in step 4, the question is now asked as to what practices does such a construction open up and close off. Solving the puzzle requires some degree of knowledge, experience and comptence. It is a cognitive and cerebral process – emotions do not help in solving the problem. The speaker talks about becoming absorbed in the task – not fully being aware of the wider aspects of the incident – therefore there is little awareness of and time to become stressed by what has actually occurred in the incident. Awareness of , dealing with, and becoming absorbed by their emotions is not a space which is available to firefighters at an incident.

In this final stage of the discourse analysis the relationship between discourse and subjectivity were explored. Discourse analysis seeks to explore what can be felt, thought and experienced given the subject position emerging through the text. This part of the process tried to identify how the different discursive constructions opened up ways for the participants to think, act and feel. Continuing with the analysis of the the incident being a "puzzle" and solving the puzzle positions the firefighters into a cognitive space, then it opens the questions as to how they relate with themselves, each other and the work they do from such a position. It allows them to be feel frustrated, sad, angry when they don't solve the puzzle, and to experince feelings of joy and elation when they do. It allows them to refernce their feelings by virtue of their success or otherwise of solving the puzzle and not by reference to the casualty per se. The positioning of themselves as "puzzle solvers" allows them to act in ways which is consistent with their training and expertise. Once they know what it will take to solve the puzzle they are less likely to be "stressed" by the incident. As can be seen the discourse analysis allows ways of thinking, being and relating to emerge which goes deeper that what has been communicated in the text.

While the process of discourse analysis appears, from the above description, to be a series of distinct stages, from the researcher's experience it was less clear cut in practice. The process involved multiple readings and mappings, and an ongoing questioning of whether there were particular aspects of the analysis which had been overlooked or missed by virtue of this being the first occasion the researcher had conducted a discourse analysis. It has, however, to be acknowledged that each discourse analysis is provisional and incomplete. It is not that the researcher is eagerly seeking to reveal a particular underlying reality which is being obfuscated and obscured by language, but instead to look at how the language is used to construct that which it speaks of.

Originally the Researcher was considering conducting a Foucauldian discourse analysis on the text in order to explore the relationship between discourse, power, history and governmentality. This was because these relationships have tended to be unexplored in the occupational psychology literature relating to "critical incident stress", although a range of psychological practices have been introduced into the work place ostensibly for the sake of firefighters health. However, as the objective of the research became clearer and the need for it to produce a framework for psychological support for firefighters became more salient, it was decided to conduct a discourse analysis rather than a Foucauldian discourse analysis. It was belived by the Researcher that the insights provided by the discourse analysis would provide more meaningful and relevant to the research questions and objective. However, the structure and presentation of the analysis contained herein may appear to follow the traditional Foucauldian model more closely, although the analysis done is not Foucauldian.

4.3 Discourse Analysis and Discussion

The discourse analysis was used by the researcher as a means of understanding how it is that participating firefighters constructed their experiences of the work they do. To provide a structure to the analysis of the transcripts, the researcher utilised the same four research questions formulated when approaching the discussion groups (as outlined in this chapter Section 4.1.2) as a structure on which to position his analysis of the transcripts. The following four sections present his analysis of the transcripts in accordance with the four research questions.

4.3.1 Research Question 1 - Constructing the Critical Incident as an Opportunity to Exercise Professionalism

The first research question seeks to explore how participants are constructing the critical incident. The concept of the critical incident is not a term which is indigenous to the fire crews participating in this research. They tend to use the words 'shout' or 'call' to refer to any emergency situations which they respond to. The terms 'incident' and 'critical incident' are primarily derived from the construction of emergencies as used in the Mitchell Model, as being critical post hoc, by virtue of the response it generates in the individual (Mitchell & Everly, 2000 p.139). Mitchell and Everly do suggest that, for emergency personnel such as firefighters, there are some incidents more than others which are likely to lead to the critical incident stress response. These incidents include:

> line of duty death, suicide of an emergency worker, multi-casualty incident/disaster, significant event involving children, knowing the victim of the event, serious line of duty injury, police shooting, excessive media interest, prolonged incident with loss, any significant event. (p.139)

This inclusive list, aims to educate firefighters that a critical incident stress response is to be expected after these incidents. However, the process of actually producing a list

only serves to reinforce what type of response is to be expected – that these incidents are always and already stressful or traumatic.

Two extracts follow. The first seeks to understand how the participants themselves construct the incidents that they respond to. It aims to be aware of what linguistic constructions the firefighters use when speaking of an incident, what subject positions such constructions open up and close off, and what implications such positioning has for social practice. The numbering (for example P20) in the extract refers to the participant number; F refers to the Facilitator (the researcher); T refers to the transcript number, each of which is contained in the appendices; L refers to the line number in the relevant transcript. While only one transcript is included in the appendices (Appendix 13) the numbering reflects that applied to all transcripts as analysed by the Researcher from each of the discussion groups.

Extract 1 **(T2, L898)**

> **F:** Are there some incidents which you would describe as worse than others?
>
> **P22:** I would
>
> **P20:** At the moment I would say the worst ones are the RTAs (road traffic accidents). That's when you're most likely to meet casualties.
>
> **P25:** Because sometimes the information that we get can be slightly a bit down the line, if you know what I mean. They might say RTA. Then when you get there it's actually somebody trapped in a car. Sometimes the information that's coming in from the public side going to whoever took the call that that information didn't get out. You don't realise until you get there that it's a lot bigger than it actually is.

F: But once you know that it's an RTA, what's it like in the rig going out to the incident?

P22: The first thing you think of is, "who do I know that's on the road?". Is it my brother?...because we deal in the local area.

P25: The probability is that someone is going to know somebody if they're local.

P20: And the mood is serious too. With a chimney fire, there we would be chatting away in the back and the driver gets there, you know what I mean. And then you get out – we all know what happens next. But when it's an RTA or something like that it's quite serious in the cab, I find there anyway. And you try and imagine the scene. O'L's cross. We know the landmark. We start visualising, trying to. And it does help as well. You don't over visualise. But you just imagine two cars, so you start thinking then what do I need. Like we got a hospital bag there, like an ambulance bag. And there's a few first responders in the group, you start thinking, "who's the best at what, and who's going to take the lead, and who's great at putting on collars?" Things like that you know.

F: And when you arrive at the incident?

P20: You get on and do it.

P25: When you arrive at the incident it's actually a different things, because you kind of go into work mode. So you actually haven't got time to work out if there is anything stressful happening. Or what's in front of you. You go away and do it. Ok afterwards fair enough, but at the same time you can't look. That's it – this has to be done and that's the way it is.

P20: It's like a puzzle I always find. You just have to solve the puzzle you know what I mean.

The discursive object in this extract is the incident. Participants describe the incident as a type (involving a casualty, an RTA) (T2, P20, L903), as something they anticipate (T2, P25, L906), which may involve them personally (T2, P25, L915), as something which can impact on their emotions (T2, P20, L920), and as performing a task or a challenge (T2, P25, L934) (T2, P20, L946). The incident is constructed as two phases – pre-arrival at the incident, which is characterised by uncertainty both about the nature of the incident and how well they will respond; and post-arrival, where they describe themselves as stepping into work mode (T2, P25, L936). The period of uncertainty is a more serious time (T2, P20, L920). The mood has changed and they prepare for the scene through mentally projecting themselves into the work situation (visualising the scene, allocating role).

In the extract the incident is constructed in two ways. On the one hand it is something unknown, which provokes stress and anxiety, emerging from the fact that they don't know what they will face, and whether it will involve a loved one. On the other hand, the incident is constructed as work, a role which they step into, a place of competence where they know what is expected of them, a series of activities that they have to do which distracts their attention from noticing anything stressful.

Both of these constructs tie into wider discourses of professionalism and competence. It is the anxiety of the unknown, that they may not live up to what is expected of them, that the incident may in some way be bigger than their capacity to respond, which is of concern to them. What they do have control over are their skills once they are actually at the incident. This is their professional space. Once they arrive and can see the actual scene, then they know what it is that they are dealing with. The scene itself is the place where they can use their skill and competence. For the participants, the accident scene is

not a place to become absorbed in the drama of the casualty, but a place where they exercise their training and professionalism.

Using the professional discourse enables the participants to position themselves at an emotional distance from the tragedy, to best help the casualties involved. The following extract brings such a positioning to the fore.

Extract 2 **(T5, L3240)**

> **P36:** An RTA with dead people is the easiest RTA you can go out to like, cause there's no panic. Whereas if there's someone trapped inside…
>
> **P31:** Roaring and shouting…
>
> **P36:** Yeah, and the fellow roaring and shouting is the least injured then like. I have to say there that we didn't crash them or we didn't burn them so all we can do is our best when we go out to them…and to hell with them, you know. It's all you can do, you can take it to heart…if you take one of them to heart then you're in trouble with every one of them. Like we haven't met anyone we know and we haven't met children as P. said.

In terms of subjectivity, such a positioning suggests that individuals need to manage their emotions, to keep them in check. The participant speaks of both the practicality and the potential emotionality of an incident. Potential difficulties arise for the firefighter when emotion overtakes the practical ("if you take it to heart" T5, P36, L3248). The speaker identifies two incidents which for them could be taken to heart – the loss of a child or of someone known to them.

On the basis of the preceding discourse analysis we are able to question Mitchell's notion of a critical incident as being directly related to the nature of the incident itself, be it an RTA, fire or whatever. The potential of the incident to cause critical incident stress is bound up with the state of the casualty e.g. if they are dead/if there are multiple casualties/if they are known to the fire crew. However, the participants in this research suggest that it is not always about the casualty. For them the pre-incident unknowns create an anxiety which can be dissipated once they arrive on scene and get stuck in to the job at hand. The incident becomes problematic, however, when the firefighter connects in a meaningful way with the incident, which could move them from a professional space into an emotional space. Being in an emotional space is not consistent with professionalism and (as we shall see in research question 4) with dominant notions of masculinity.

Such a construction of the incident forces the researcher to reconsider both Mitchell's notion of critical incident stress and debriefing. Are both of these definitions an attempt to mask the emotional responses of firefighters by medicalising them? Do they open up a space which allows the male firefighters to respond emotionally to situations which they have connected with, but by calling it stress construct their responses as a pathology which may be deemed to be more acceptable? These questions will be explored more completely in research question 2.

4.3.2 Research Question 2 - Constructing Their Own Responses as Emotion

The Mitchell Model clearly constructs the firefighters' reactions as a form of stress, which they define as being "characterised by a wide range of cognitive, physical, emotional, and behavioural signs and symptoms" (Mitchell & Everly, 1986 p.3). The problem with this construction is that it is using the language and structure of a medical discourse, thereby producing the stress which it speaks of. A firefighter's thoughts,

feelings, behaviour and body are to be normalised and pathologised as to whether they constitute the signs and symptoms of stress. The individual is encouraged to self-assess their own reactions according to the technology of the CISM model (e.g. 'Identifying Your Most Common Symptoms of Distress', Mitchell & Everly, 2001 p.38). Each of the CISM interventions has a teaching component designed to let "the group know that those symptoms are normal, typical or due to be expected" (Mitchell & Everly, 2001 p.178) and to provide the participating fire crew with "a variety of stress survival strategies" (Mitchell & Everly, p.178). In essence, participants are encouraged to make sense of their experiences as being indicators of pathology.

This research question seeks to explore how the participating fire crews discursively constructed their own experiences of the emergencies they encountered. In this next extract the participants speak of a variety of reactions to two particular 'shouts' they responded to.

Extract 3 **(T2, L1248)**

> **P26** I think we're all upset, but you don't get stressed, but I think every one of us gets upset. There nobody going there….like the last incident in B. like that was sad. The Priest there, and everybody stopped, and he blessed and prayed and it was sad. It was upsetting. It wasn't stressful but it was upsetting. And you're saying, "Jesus, someone has to go there now and tell his family or whatever". At the incident normally you have ten minutes where there's nothing happening and you stay around and you're sort of saying now somebody has to go and tell his family and he's not coming home. And you get upset but not stressed. Definitely not stressed. You know. Some would…the one in C., the one with the girl under

the truck…I played my cards there, unless my Officer tells me that I have to go up and do something, well I didn't go near her. She was cut to pieces.

P22 I found that very upsetting, even driving up to it, because I knew that there was a baby involved. Even driving to it my legs were shaking, even driving up, because they said it was a mother and child under the truck. So my legs…I couldn't drive back…G. drove back. Even on the way up I said "I can't…no I won't be able…" And T. said "You just have to get there, you just have to get there". Once I got there then I knew the child was there, the child was grand. It was only…that I started thinking… "that's the mother, no that's the au pair" but you think "the child's grand, no the mother is dead". You start going into "if this was me". So, they are stressful for me still to go to I think, RTAs.

In this extract participants construct a clear distinction between emotion and stress. It is evident that there is emotion in the situation, such as "sadness" (T2, P26, L1249) and "upset" but they are construed as commonly shared, as humanising ("every one of us gets upset" T2, P26, L1248) and not as a sign that there is something wrong with a crew member. The construction suggests that the individual becomes the 'site' or the 'container' of the emotion. The scene sets out various cues which prompt, or set the scene, for emotionality – saying the prayers over the dead, the life changing significance of the event for the deceased and their family – that the fire crew are themselves both observers and participants in that drama. In other words, fire crews become sad and upset because they are sad and upsetting situations. A realist understanding of emotions will seek to identify the various types of emotions experienced by the firefighters, the frequency of their occurrence, or their physiological manifestations in terms of an individual's heart rate, facial expressions, and how these are understood by others to be manifestations of a particular emotion (James, 1984). From a constructionist perspective

however, emotions can be understood in terms of being performances, that they are actions which an individual 'does' through the physiological means at their disposal. As Gergen (1997 b) states "emotions do not 'have an impact on social life'; they constitute social life itself" (p.222). Their intelligibility as emotions comes from within the wider pattern or network of interactions in which they are embedded, with the individual being the site for their occurrence. With regard to the CISM model therefore, constructing emotions as being a sign or symptom of critical incident stress is questionable. Locating the emotion as something within a person, rather than as something which is emergent from the situation within which the firefighter is a character, allows emotions to be seen as less a sign of pathology and more 'of a way of being' within the situation.

Stress, however, is discursively constructed in both physical ("legs shaking" T2, P22, L1261) and cognitive terms ("I won't be able" T2, P22, L1263). It prevents the speaker from physically doing their job ("I couldn't drive back" T2, P22, L1262). The object of the thought is not the incident or the casualty, but a positioning of the firefighter themselves directly into the situation, as if they themselves were the casualty - "You start going into 'if this was me' (T2, P22, L1267). The participant draws on the biomedical model of stress (Cooper & Marshall, 1976) which firmly locates it within the individual's biological and cognitive processes. However, the excessive individualism ignores the possibility that the stress can be a signifier of something other than an individual's biological processes. Barley and Knight (1992), adopting a critical perspective, challenged this understanding of stress as a disease, which emerged given the right conditions, and reconstructed it as a "cultural as well as a psychophysical phenomenon" (p1).

There are a number of important implications which need to be attended to on the basis of the constructions utilised by the participating firefighters with regard to their reactions to the 'shouts'. First, calling their responses critical incident stress is a restrictive notion with the potential to pathologise the normal. It positions all possible human responses as being a sign or symptom of pathology, when all they may be is the expression of human responses in the presence of tragedy. If a firefighter is crying and we see tears, we can respond humanly and share in their sadness or grief, or we can ask them to see the psychologist to help them deal with their stress and trauma. Secondly, the concept of critical incident stress ignores human subjectivity and meaning. It places the incident as being the source or cause of the stress, when the source may be in the meaning which the 'shout' has for the firefighter involved, or even in how they were feeling on the day in question. Calling it a stress problematises the response, when that response may really be the most appropriate, given all the variables at play.

4.3.3 Research Question 3 - Constructing Themselves as Professional Firefighters

4.3.3.1 The Fire Fighter as Hegemonic Man

4.3.3.2 The Firefighter as a Professional

Within the Mitchell Model firefighters are viewed as being particularly vulnerable to experiencing critical incident stress by virtue of the work that they do. This vulnerability is supported by reference to the presence of PTSD symptoms within samples of emergency service workers, sometimes in comparison with samples drawn from the wider population. Mitchell and Everly (2001) conclude:

> The risk of becoming a victim of PTSD is primarily a function of being in a high-risk, potentially traumatising situation/experience, thus individuals in 'high-risk' occupations (such as emergency services professions) are at a higher than normal risk of PTSD. (p.67)

While there is an intuitive logic to what they say, having provided support to people in a variety of crisis situations the researcher is of the opinion that it is the people in the non-'high-risk' occupations who experience more intense reactions to incidents by virtue of the unexpected nature of it (e.g. bank raids, fire at work, fatal industrial accident). Fire crews on the other hand have surprised the researcher with their equanimity in the presence of some extremely horrendous situations.

Basically, the Mitchell Model is proposing an exposure theory with regard to critical incident stress. If an individual is not exposed to the incident then their signs and symptoms cannot be regarded as critical incident stress. This mirrors the DSM-IV construction of PTSD, where the traumatic event is a necessary, but not sufficient, condition for the diagnosis to be given. So firefighters, by virtue of their repeated exposure to critical incidents must surely be prime candidates to develop critical incident stress. Mitchell claims that "for those in high risk professions, any single traumatic incident could engender symptoms of post-traumatic stress or fully developed PTSD". It is such claims which, understandably, are of concern to Fire Services management.

Mitchell is suggesting that one of the primary ways in which firefighters are to make sense of the emergencies and incidents which they encounter is through the 'lens' of stress and trauma. The Model positions them as being the 'secondary victims' (Everly & Mitchell, 1995 p.4) and, as such, they need to be safeguarded and protected by these quasi-therapeutic supports. It presents the role as being inherently dangerous from a psychological perspective. The CISM model may position them as victims, but this question seeks to explore the discursive constructions which the firefighters use to position themselves with regard to the 'shouts' that they respond to.

Generally within Occupational Psychology the approach to subjectivity tends to be one where it is understood as being a quality or property of the individual. The individual is understood as possessing particular personality 'traits' (e.g. Cattell 16PF, 1949) or 'types' (Myers-Briggs Personality Indicator, 1980). The occupational psychologist will try to assess their suitability by means of identifying the degree to which they possess particular aptitudes and intelligences. From a constructionist perspective however, attending to subjectivity at work, both in terms of being in a role in the workplace and as being produced through discursive practices, is to explore how the individual is 'produced' or 'assembled'. It explores the discursive processes which shape subjectivity, or as Rose (1998) describes:

> What needs to be analysed is the mode of relation to oneself enjoined in definite practices and procedures, links, flows, lines of force that constitute persons, and run across, through and around them in particular machinations of forces – for labouring, for curing, for reforming, for educating, for exchanging, for desiring, not just for accounting, but for holding accountable. (p.181)

In adopting a constructionist perspective to the question of how the participants construct their subjectivity, it is therefore appropriate to explore how their sense of self is assembled and enabled not just through the language they use to 'story forth' (Gergen & Gergen, 2003) but equally by exploring the forms into which they are "machinated or composed" (Rose, 1998 p.182) as fire-fighting subjects within the Fire Service. What is of importance to us in this study is how the various constructions used by participants, both simultaneously opens up and closes off particular ways of being, when it comes to dealing with the critical incidents they encounter.

In the next extract participants are speaking of the work they do as being not just a role but an identity. They describe the work as involving a high degree of "training" (T4, P59, L2936), as something which requires them to do their best for "someone in trouble" (T4, P59, L2937). The work is equally spoken of in emotional terms, as something which gives them a "buzz" (T4, P59, L2939), and as something that they can be really "proud" of (T4, P62, L2942). The pride is a shared pride, which comes from the very title of being a firefighter and which automatically brings other members into a personal relationship of "brotherhood" (T4. P64, L2947)

Extract 4 **(T4, L2936)**

> **P59:** The level of training that we have now. When the pager goes off if there's someone in trouble you're there doing the best you can for that person and if something happens to that person you know in your heart and soul that you've done the best you can for that person like. That's the buzz like, you know when the pager goes off that there is someone in trouble whatever, a big fire…
>
> **P62:** It's a job we're all really proud of…really proud of. Everyone is. You see lads wearing badges from other stations and other countries even going on holidays even you wear your t-shirt with your local badge. You're proud to say you're a firefighter.
>
> **P64:** And that goes no matter what country you're in. You could send someone out to Australia and two Fighters will meet up and they will become lifelong buddies after five minutes and spend hours talking. It's a kind of brotherhood or something.

It is evident that the work they do is being constructed as something which has a very personal and intimate identity for participants. Such a construction suggests more than a

shared collegiality which is to be found in most professions (such as doctors, lawyers, etc.), but is qualitatively different by virtue of the level of intensity and ownership which is ascribed to the relationship – that of "brotherhood" - which is a phrase which possesses familial, military and religious connotations. The role of a firefighter is therefore constructed as being more than a job, but resonates with being part of a wider familial discourse. What is evident from this construction is that being a firefighter is very much seen as an identity rather than a role. As Fairhurst (2007) suggests, such an "identity is often cast as the part of the self-concept that derives from membership in one or more social groups, along with the value and emotional weight attached to that membership" (p.54).

Constructing their identity as being part of a brotherhood can serve a very real purpose. Being in a family creates an intense bond between crew members. It implies a commitment which is more than just the performance of a task, and allows relationships of trust to emerge. The discursive construct of the brotherhood has very real effects for the work they do, in terms of opening up the relationship of trust between crew members, as is evident from the following extract:

Extract 5 **(T7, L5139)**

> **P17** But you need to get on with a person too unless you could be inside a burning building with a fellow behind you, you want to be getting on with him. You wouldn't want any tension between you. When you're asking him for something or he's asking you.
>
> **P12** You must be able to trust the person.

If their identity with the position is so intense, what are the implications for how they engage with each other around the incidents which they encounter? Firstly, if something happens to one member of the brotherhood then it can affect all the other members who rally round and support the afflicted member. This was very much evident by the response of fire crews worldwide to the losses sustained by the New York Fire Department during the attacks on the World Trade Centre on September 11th 2001. Secondly, it allows space where things can be said and understood inside the brotherhood, which may not be interpreted the same way by those outside. The use of what the fire crews call black humour allows for a shared expression of jokes which may not be appreciated by those outside the brotherhood.

However, being in a brotherhood can equally bring its difficulties. Maintaining the bond may be regarded as being of higher priority than dealing with any problems which may emerge. It may be difficult to disagree with or speak out against any other crew member. Admitting a difference or the existence of a problem might be challenging for an individual.

4.3.3.1 The Firefighter as 'Hegemonic Man'

Firefighter is a gendered concept. While the job title may have changed from that of Fire Man the concept of firefighter still retains many of the characteristics and values which are commonly held to reflect a more masculine than feminine way of being in the world. In the context of this study, the number of male participants in the discussion groups greatly exceeded the number of female (male 86, female 3), which reflects the gender disparity existing within the Fire Service as an employment sector. However, of interest to this researcher is the question of how gender is being performed by the participants, as such performativity has significant meaning for subjectivity, regarding

how the firefighters engage with the emergencies they encounter, and for how best they can be supported in the work that they do.

In keeping with a constructionist perspective this research does not locate notions of man or woman within the biological make up of each sex. Butler's (2008) concept of performativity helps at this point to explore how the understanding of what it is to be a man is not just a role or a performance which he must undertake, thereby implying the existence of an authentic subject behind the performance, but that what it is to be a man is assembled through the available discourses, and produces that which is taken as constituting man or maleness. Butler (Gender Trouble xv, 2008) states:

> The performativity of gender revolves around this metalepsis, the way in which the anticipation of a gendered essence produces that which it posits as outside itself. Secondly, performativity is not a singular act, but a repetition and a ritual, which achieves its effects through its naturalisation in the context of a body understood, in part, as a culturally sustained temporal duration.

In the following extract the participant is speaking of how the CISM support service is perceived within the Fire Service. The problem, as he sees it, is that the "old way" of being a firefighter is primarily constructed by reference to being male – "be a fucking man" (T1, P47, L26).

Extract 6 **(T1, L25)**

> **P47** That it's kind of for their benefit you know. I still feel that out there it's still…the old way is kind of ruling the roost as such. "Be a fucking man and stand up". That is the way it was supposed to happen and it will take a long time to change that. That's my view of the thing, but everyone wouldn't have the

> same view. But I think it's one of the things that should be addressed that it should be…kind of put out there more and advertised more in stations and maybe they should meet A or yourself more often or something. Like they started off the peer support thing, every once in a while they should meet or they should kind of…

According to the speaker the "old way" (T1, P47, L26) of being a man is constructed in spatial terms, as "standing up". It evokes images of the rampant body, being defiant, not cowering or seeking to hide. It evokes the image of John Wayne. It is the hegemonic masculinity of Connell (2008) which he defines as:

> The configuration of gender practice which embodied the currently accepted answer to the problem of the legitimacy of patriarchy, which guarantees (or is taken to guarantee) the dominant position of men and the subordinated position of women. (p.77)

Connell sees the correspondence between cultural ideal and institutional power as allowing the concept of hegemonic masculinity to thrive within organisations, which is what the speaker refers to when he states "the old way is kind of ruling the roost as such" (T1, P47, L26). The cultural ideal for a firefighter is that of the hero, unaffected by the danger which he faces. The speaker however, is a dissenting voice against the "old way" (T1, P47, L29). He is offering a commentary on how things are "supposed to happen" (T1, P47, L27) and acknowledges that it will take time to change - "it will take a long time to change that" (T1, P47, L27) but he positions himself and possibly others as being different in their views. The construct of traditional masculinity is not a stable construct within the service, but other possibilities of how to be a man are opening up through the CISM service ("maybe they should meet A or yourself more often" T1, P47,

L30). The CISM service providers are being positioned as allowing the men to 'be' in a way which is different from what is expected of them within the service.

The concept of gender emerged later on in this same discussion. In this extract participants were discussing an occasion regarding the fact that the local newspaper had carried a report that counselling was being made available to firefighters after a particular incident. They discussed how annoyed they were at this revelation and that, while confidentiality had not been broken, they believed that the public perception of them had been lessened.

Extract 7 **(T1, L492)**

> **F:** Did it in some regards diminish your role…or cast aspersions on your professionalism or…
>
> **P53:** Did it make girls of us?
>
> **P49:** I think you said it D. That people at work were saying "Jesus Christ look at ye."
>
> **P48:** No, but I mean it's the family you would think that like you know, they have enough to be dealing with now, and they had the piece on the family and the poor fire brigade at the bottom of it had to get counselling.

This extract highlights how the dualism of male/female is brought into play to account for the fact that the public had been made aware that counselling was available. Counselling in this instance is constructed as a feminising process, that it in some way made "girls" (T1, P53, L495) of the crew members. To be made a girl is seen as shameful ("Jesus Christ look at ye"). Such a view is, however, rejected by another speaker. He draws on an empathetic discourse to account for what the family, who were

the real people suffering, must have thought when they read about the Fire Brigade receiving counselling. Such a narrative still positions the firefighters as appearing weak because they 'had to get" counselling. The speaker not only draws on traditional notions of masculinity but equally highlights the performativity against which men are to be judged and evaluated. David and Brannon (1976) succinctly summarises these as being:

> 1. "No sissy stuff". One may never do anything that even remotely suggests femininity. Masculinity is the relentless repudiation of the feminine.
> 2. "Be a big wheel". Masculinity is measured by the power, success, wealth, and status. As the current saying goes, "he who has the most toys when he dies wins".
> 3. "Be a sturdy oak". Masculinity depends on remaining calm and reliable in a crisis, holding emotions in check. In fact, proving you're a man depends on never showing your emotions at all. Boys don't cry.
> 4. "Give 'em hell". Exude an aura of manly daring and aggression. Go for it. Take risks. (p42)

The discourse of hegemonic masculinity is pervasive, but being challenged by the participating firefighters.

4.3.3.2 The Firefighter as a Professional

Throughout the transcripts participants made repeated references to how improvements in their equipment and training has not only better enabled them respond more effectively to the emergencies they encounter, but has had a profound influence in how they view themselves as firefighters. In the following extract participants discuss how their own sense of themselves as firefighters has been enhanced by virtue of improvements in training and equipment:

Extract 8 **(T5, L3330)**

P28: What I find anyway and I don't know about the boys, I mean when you come up here you know you're going to some emergency and you know you're going to something. But when you come across it in your own life outside the services it's completely different like. Then you're first on the scene…and then you've a lot of other things to deal with. Whereas when we go out all that is done 'cos someone has to call us and…we have a reasonable idea. But when you walk around the corner and find something, you're totally unprepared, it's completely different. Way tougher.

P36: We're like the 'ghost busters' like, that kind of thing like…we have all the gear.

P28: You are prepared a lot differently like.

F: As a firefighter like?

P28: Yes, we know before the night is out we could come across an accident. But when you go back home you don't expect to see something nasty when you open the door like, with the help of God. To be first on anything is way more traumatic like.

P36: To be trained as we are, we are very confident in ourselves. It takes a lot…We are very confident in ourselves and each other and in what we do because we are so well trained and it takes a lot of the fear out of it as well.

P31: And we have good gear like. I know I said we might have a fear of it not starting but ninety-nine times out of a hundred it will start like and we have good gear and we are trained to use it. Every fellow here is well trained to use it.

P36: Like I said, what I'd hate is going and some bit of gear not working, something along that way like. At the moment, up till now, in thirteen years, it hasn't…

In the above extract the participants position themselves relative to two different scenarios – one is where they encounter an emergency in their own personal life, and the second is where they respond to an emergency as firefighters. They speak of two selves, the "unprepared" (T5, P28, L3336) self who finds dealing with the personal scenario as "way tougher" (T5, P28, L3336) in contrast with the "prepared" (T5, P28, L3340) self, the firefighter, in the second scenario which is constructed by reference to a professional discourse. For the firefighter the unexpected has been removed ("you know you're going to an emergency" T5, P28, L3331), they are prepared ("we have a reasonable idea" T5, P28, L3335), they have equipment ("we're like the 'ghost busters'" T5, P36, L3338). The "prepared" self is not afraid, as the training, equipment and support removes the "fear" ("it takes a lot of the fear out of it as well" T5, P36 L3350) which allows participants to speak from a position of "confidence" in themselves ("to be trained the way we are, we are very confident in ourselves" T5, P36, L3348). The only fear they speak of is not being able to do their job professionally through equipment failure ("we might have a fear of it not starting" T5, P31, L3352).

In summary, the participants have drawn on a number of discourses – the brotherhood, hegemonic masculinity and the professional – to account for how they experience themselves as firefighters. Such discourses open up different ways of being for the participants, each of which needs to be explored when looking at what support, if any, is needed by them in dealing with their experiences of the emergencies.

4.3.4 Research Question 4 – Constructing Support as Honour

"If we go to an incident and we come back after a very bad incident how are we supposed to know if we want you (i.e. CISM Practitioner) deep down" (T6, P9, L4642)

This research set out to develop an intervention which would help advance on the current Mitchell Model of critical incident stress management. This objective still remains its primary task. However, in adopting a critical realist perspective, it is evident to the researcher that the concept of an intervention is in itself somewhat problematic because of the plethora of multiple meanings, but only one of which is privileged. Within the current CISM model, providing an intervention is firmly rooted within a medical discourse. The CISM intervention is designed as a means of reducing or preventing the onset of future illness or psychopathology. It is akin to an inoculation or vaccine being administered – the illness may not exist now, but by administering this intervention we will prevent or reduce the likelihood of it occurring in those to whom it is given.

However, in adopting a constructionist rather than a reflective view of language, the intervention is not a neutral but a productive force, producing that which it speaks of both through its structure and its process. The intervention as it currently stands can only be valid if the firefighters' reactions can be understood as a form of stress – that is they are medicalised. However, as has been discussed in Research Question 1, there are a variety of constructions used by the participants in their explorations of the 'shouts' to which they respond. Firefighters do not construct the incident as always/already traumatic.

Furthermore, the critical incident stress debriefing process seeks to medicalise the experiences of firefighters through both its process and structure. It privileges a particular type of therapeutic talk. The discussion which takes place within a defined context, with a pre-defined structure, has a specific purpose, and is always conducted in

the presence of an external trained professional. Its various stages or steps are designed to allow for the open and free expression of the thoughts, feelings and reactions of the participants in relation to the incident that they have encountered. It is the cathartic value of such expression which is regarded as being the real value of providing such CISM intervention. Robinson (2000) (in Raphael & Wilson, 2000) states that when describing the essential elements of a critical incident stress debriefing:

> the verbalization of our inner psychological processes has been argued, by some, to be a central task to the recovery of trauma. Putting word to thoughts, feelings and visual experiences appears to enable the person to bring them under control and make them more manageable. (p.104)

What is of interest here is the way in which participants speak to each other and the function that such speech serves. The use of humour and their ability to see a humourous aspect even within the most difficult and tragic of scenarios serves as both a buffer and as a connection with other crew members. It has a humanising effect, as is highlighted in the following extract:

Extract 9 (T7 L5051)

> P12 “And there’s another thing which is probably unique to firefighters, there is a black humour there that no matter how bad the situation is, and this is not making light of it in any way or people buring in car crashes whatever, there is a kind of uniqueness in the worst scenario. You can find something that you can hve one small little laugh over and it kinds of breaks that momentum. Jesus, we’re human after all. Now it may be a shoe falling off, or something so stupid, but like we think “oh gee this is great, we are human after all we can laugh again. And that is probably unique to the job we do in that we might see the most horrible thing but just something might strike you and you say “did you spot that, or did you see one of the other lads, he got a haircut or something”.

> And like you can laugh and say gee this is great and that uniqueness is there as well you know.

The purpose of humour recounted in this extract serves both a connecting function and a humanising function. It is not laughing at but connecting through a shared sense of what may appear trivial to outsiders or indeed within any other circumstance would not be inherently funny. However, to them (i.e fire fighters) in that moment and in that context the humour makes them feel human. It shields or creates a buffer from the "most horrible" situations in which they find themselves.

Finally, the CISM intervention positions the firefighters as the client, patient or victim. They are in need of some form of expert intervention for this inoculation to take place. But, as has been discussed in Research Question 2, this is not a subject position which sits easily with the present participants. They acknowledge that they themselves are neither the casualty nor the hero, but seek to understand themselves as the "professional", wanting to do the job to the best of their ability in rendering assistance to people in emergency situations.

While the intervention process as it currently stands is a medicalising one, the *process* of intervening need not necessarily have to be a medicalising one per se. The challenge in this research question therefore becomes one of how we can establish an intervention which is rooted in the practices of the firefighters, while providing them with the benefits of the insights gained from their own experiences of the 'shouts' that they deal with.

4.3.5 The Intervention as Stigmatising

The Mitchell Model centres itself on providing an opportunity for the crew to talk about their personal thoughts and reactions in the immediate aftermath of a critical incident. The guidelines on conducting a debriefing (Mitchell & Everly, 2001) set out the parameters by which the session is to be conducted, and while these respect the rights of individuals not to participate, in effect there is a strong emphasis placed on all crew members participating. In one particular instruction Mitchell and Everly state:

> Participants in the de-briefing do not have to speak if they do not want to. Everyone has the right to refuse to speak. It may not be in their best interests, but they do have that right. Participants are told that they merely have to shake their heads in a "no" pattern and the team will leave them alone. (p.168)

In many regards the above extract highlights how "de-briefing" produces the participants as a particular form of subject. Participants are accorded the "right" not to speak, which is in keeping with the values of individuality and freedom. Their "right to refuse" is upheld although it runs against what is expected of them within the debriefing process. However, exercising that right is then negated as not being "in their best interests". Their best interest has, however, been determined in advance by the regime of truth offered by CISM and its proponents. The individual is positioned as not knowing what is in their best interest – that has already been determined for them. In effect the individual is constrained either way – they are made subjects by the CISM process through either their participation or non-participation. The chimera of freedom offered by debriefing (freedom to say no, freedom from the effects of the incident) is actually the power of the CISM knowledge to force firefighters to understand themselves and to act on themselves in a particular way.

The following extract explores how participants are made subject through their participation or non-participation in a debriefing.

Extract 10 **(T1, L122)**

P50: Well my opinion is that I think that it is…'cause ok…it might only affect two or three of the group, but then again we are all in a crew and that does treat people that need it, that they're supported. Like what K. is saying is that you might be in a situation where you don't need counselling yourself, but I think that it's important say, if there was an incident K., you thought nothing of it, I was distressed, but you should be there for the session. Everyone should be there together. As a group we should all be together.

P52: I think K. is right. I mean if you don't feel like, you shouldn't be pressured into the group if you don't want to be in the group. Everybody deals with it separately. Like I believe that this is important and something to fall back on. But sometimes you just mightn't want to…you might have your own way of dealing with it. You might want to deal with it your own way.

P53: Under no circumstances was I saying that the service shouldn't be there. It's quite the opposite. The service should definitely be there and most emphatically on an individual basis. The choice should be there for the individual to take or leave the service as they want. I'm not taking from the group sessions that we've had. I'm for those as well because they do help. Even if you don't like the sessions, or whatever, it can have a kind of inverted effect on you. You can pick it up later. I honestly don't know what I'm saying other than there is a kind of perceived obligation to attend. It's a delicate matter. I don't know how you'd facilitate the person who didn't want to go and not stigmatize them. That's all I'm saying.

P48: But it's also where you have to go around the room and everybody has to say something. 'Cause I felt forced to say something, and I was just copying what someone else was saying.

P53: Spot on what I'm on about. And in fairness to D. at the last session he simply said look, I'd prefer not to talk about it. And that was quite expected. But we should take that on as the norm.

In this extract participants speak of support in two different ways – the support between the crew members, and that crew support as constituted through the debriefing process. They position the crew as being always willing to support each other ("we are all in a crew that does treat people that need it" T1, P50, L123) to the point where they should be willing to participate in something which they don't feel they need for themselves ("everyone should be there together" T1, P50, L127). The choice to be present is not free, but constrained by loyalty to crew members – individuals must be willing to put themselves into a situation to help another who might need it. Support therefore is constructed by reference to a moral discourse - as something mutual and right.

How that support is to be given is determined through the debriefing structure which they describe in terms of a number of constraining effects – as pressure (T1, P52, L130), as obligation (T1, P53, L142), as stigma (T1, P53, L144), as forced (T1, P48, L147). Again a moral discourse is called into play, but this time it is constituted as being obligatory, that if they don't do it then they are not being a supportive crew member. So the CISM process can position the individual firefighter as needing to play along, by being complicit for the sake of crew support and cohesiveness ("I was just copying what everyone else was saying" T1, P48, L148). Gergen's (1994) concept of emotions as relations, allows us to see that the feelings of obligation, pressure and stigma are

appropriate although undesirable from the perspective of open engagement as required by the debriefing process. Regardless of its allusions to freedom and choice debriefing is a regulatory practice, one which draws participants to think of themselves. However, the support provided by the counselling service is spoken of as being of value ("I'm not saying the service shouldn't be there" T1, P53, L136) but the choice as to whether to avail oneself of the support or not, needs to be made on an individual basis ("should definitely be there and most emphatically so, on an individual basis" T1, P53, L137). The question therefore arises as to how the concept of support is enacted within the fire crews, and how the counselling support service can position itself to meet with those understandings in a meaningful way.

4.4 Conclusion

This chapter has identified and explored the constructions which the participating firefighters have drawn upon to account for their own experiences of themselves and the work they do. A number of significant constructions emerge which have real implications for the model of support being produced and for any practitioner working with fire crews.

Firstly, it is evident that the critical incident is not a concept which has any resonance for them. The 'shout' first and foremost is an opportunity for them to display their professionalism. They want to do a good job, and do not see their role as being caught up in the drama or tragedy of the situation. Undoubtedly, some emergencies are worse

than others, but the clear priority for them is that they do an effective job. Practitioners must therefore, first and foremost, be conscious of the significance of how well the 'shout' went for the firefighters. The mission of an effective rescue comes first. This insight has implications for the management of the Fire Services. Equipping and training people to effect a successful rescue is as much to do with psychological health and well-being as is the provision of counselling interventions. Once individuals and crews know they have done the best they can they are better able to deal with any psychological difficulties that may emerge.

A further important conclusion of this research is that participants discursively create a distinction between stress and emotions. Extract 3 highlights how they position themselves as being emotional after an emergency response – that they can empathize with the fate of the casualty, or the implications for the family, or allow an aspect of the incident to resonate with their own personal situation. Emotional responses were understandable, natural and acceptable. Stress however, was seen in physiological terms ("even driving my legs were shaking"). Stress was associated more with physical anxiety and was expressed and something they could experience both before and after the shout. The extract 3 highlights that the speaker was willing to admit to the emotional feelings evoked by the situation, but did not view them as a sign of something wrong, of being stressed. It was an empathy, a connection with the incident and its implications for those involved. This is at variance with how emotions are constructed within the Mitchell model. It speaks of emotions as being signs and symptoms of critical incident stress.

The discourse analysis found some important insights regarding how the firefighters discursively constructed themselves. Participants strongly rejected the subject position

that they were victims of the ‘shout’. They were there to help, and to make the situation better. A significant construct they used was that of the ‘brotherhood’ – that they were in some way connected to each other and separate to everyone else. This is a very significant aspect to be borne in mind by any practitioner working with crews. It would be important for the practitioner to recognise that they are not part of this brotherhood, but that they are on the outside. In this regard Mitchell (2001) got it right. His initial focus was on training members of the service to act as peer supporters to others. This is a valuable concept that is in keeping with the brotherhood construct.

In terms of intervention, the important construct which participants drew on was that of honour. They drew on constructs such as stigma to reflect their concerns about the existing model. While support-seeking could easily be seen as a sign of weakness, the realisation that support might be needed by any one of them ensured that it was not going to be rejected out of hand. Humour served a humanising function – laughter served as a means of connecting with each other and indeed with their own humanity. It served a distancing function between them and the tragic situation which they were responding to.

The implications for the development of a support model are clear. Any model must avoid those processes which label and pathologise, or which may be stigmatising to individuals themselves, particularly in the face of other crew members. The firefighters’ own methods of supporting each other must be reinforced, whether it’s the chat and the cup of tea afterwards, or the kick around with the football. Practitioners must be open to affirming the significance of these indigenous crew processes, and save the group counselling process of critical incident stress debriefing to their own counselling rooms.

CHAPTER 5

QUANTITATIVE STUDY - USING Q METHODOLOGY TO ASSESS FIREFIGHTERS' CONSTRUCTIONS

5.1 Introduction

A critical approach to studying the Mitchell Model of 'Critical Incident Stress Management' has allowed both a wider and a deeper understanding of its constructed nature to emerge. In Chapter 3 many of the assumptions surrounding and within the CISM model have been critically evaluated. Essentially, the Mitchell Model rests on a series of assertions which construct the work of the firefighter as being an inherent source of pathology - that there exists specific type of incidents (critical incidents) which produce a specific form of stress (critical incident stress) which, if left untreated (by means of critical incident stress management techniques) will lead to a particular type of psychiatric illness (post-traumatic stress disorder) occurring. While a great deal of research has focused on either confirming the presence of PTSD type symptoms within a population of firefighters, or as to the relative effectiveness of CISM as an appropriate form of intervention, or on the hermeneutic integrity of PTSD as an actual illness within the lexicon of psychiatric illnesses, this research has sought to interrogate the fundamental assumptions that firefighters, as an occupational group, experience their work as being a pathology and a quasi-therapeutic intervention as exemplified by CISM as being warranted.

Such a concern can only be addressed by understanding how it is that firefighters themselves discursively construct their experiences of the work that they do. Adopting

such a perspective has allowed the researcher to explore aspects of the firefighter's world which the traditional focus on the incidents has tended to ignore. The discourse analysis utilised in Chapter 4 has allowed alternative constructions of how the firefighters engage with, and respond to their work to emerge. It allowed for the relationship between the firefighter, the Crew and the work they do to be given expression. Fundamentally, it highlighted that the incident itself was not necessarily the source of trauma, but was being constructed in terms of how the crew engaged with the challenge they faced, the professionalism of their training, their skill in using equipment, and the tragedy it represented for the people involved. The discourse analysis gave expression as to how the firefighters' 'reactions' to the incident are deeply embedded in constructs other than a simplistic understanding of the incident as being traumatogenic in nature, for example constructs such as 'masculinity' and 'relationships between the crew members'. It is the researcher's view that by adopting a critical perspective and utilising a methodology of discourse analysis, it has allowed a shift in emphasis from focusing on searching for a causal relationship between the incident and the firefighter (as is the case in most contemporary research into CISM) to one where both are given expression by the discursive constructs used by participating firefighters.

However, this research must still address the question as to what form of support needs to be provided to firefighters as they engage with the work that they do. Undeniably, firefighters are faced with some incredible challenges which not only bring them into direct contact with scenes of carnage and tragedy, but also involve injury and loss of life to individuals, families and communities. The legal obligation on employers remains the same: to ensure that the individual firefighter does not experience any illness or injury by virtue of the work he/she does.

So how does this research aim to achieve that objective? What does this research have to say in helping produce a model of support for firefighters which has a relevance and meaning which is both consistent with their own understanding of themselves and the work they do?

The discourse analysis allowed particular constructs and themes to emerge which participants used in their own discursive constructions of themselves, the incidents they encountered, their own responses to their own incidents, and what sort of support they believed was helpful in enabling them to sustain themselves. As has been discussed in Chapter 2, while such an analysis allowed for alternate construction than purely a pathological framework it only goes so far in helping formulate what a suitable intervention would look like. At best, it informs the research of the key constructs used by the participating firefighters, and gives a depth of meaning which any subsequent model of support can draw upon. However, to fully develop a coherent support model needs these constructs to be further refined and verified to ensure that they have a salience with a wider group of firefighters, and that the emergent themes are indeed constitutive of ways in which others within the population experience themselves and the work they do.

The question therefore emerges as to how the constructions drawn upon by participants in the discussion groups and as identified by the researcher though the discourse analysis can be said to be equally constitutive of the subjective experiences of a wider group of firefighters. In other words, the issue of generalisability emerges – to what extent are the conclusions of the discourse analysis applicable to that of other firefighters thereby ensuring that any subsequent form of support has both a relevance and a meaning to the wider population of firefighters.

This chapter aims to address that issue by checking and verifying the elements of the emergent constructions with a different group of firefighters. However, on this occasion a quantitative process will be used.

By using statements and concepts which the firefighters themselves have expressed during the discussion groups, and which the researcher has identified as being of significance in the discourse analysis, then asking a further group of firefighters to rank their level of agreement/disagreement with these statements, commenting on why they chose their particular ranking, and subjecting these rankings to a statistical process (q methodology) designed to identify those specific statements which are constitutive of a particular subject position, will make it possible to develop a model of support and intervention which is based on a triangulated research model.

Triangulation is a well established research strategy. Jick (1979) states:

> the triangulation metaphor is from navigation and military strategy that use multiple reference points to locate an object's exact position. Given basic principles of geometry, multiple viewpoints allow for greater accuracy. Similarly, organisational researchers can improve the accuracy of their judgements by collecting different kinds of data bearing on the same phenomenon. (p.602)

A mixed methods strategy will be adopted in this research to allow for the insights gained from the discourse analysis to be supplemented by a quantitative analysis of the emergent discursive constructs.

Such a strategy equally allows for the corroboration or otherwise of emergent conclusions drawn from both the quantitative and qualitative methods. A criticism which can be levelled at discourse analysis as a methodology is that its conclusions can be somewhat limited and are not readily generalisable to a wider population – that the conclusions reached by the researcher on the basis of one particular population sample are difficult to extrapolate out to others within the population.

Adopting a mixed method strategy enables this researcher to not just retest the conclusions which emerged from working with one sample of firefighters with another sample of firefighters, but to open up and meaningfully explore any variances which may be apparent between the two samples. Such an interrogation allows for the researcher to propose a support strategy for firefighters which is based on both a qualitative and quantitative exploration of how they experience their work.

5.2 Method

5.2.1 Q Methodology

Q methodology is a statistical process which was developed by William Stephenson (1953) enabling human subjectivity to be studied in a systematic way. Within the framework of q methodology, subjectivity is constructed as "nothing more than a person's communication of his or her point of view" (McKeown & Thomas, 1988 p.12). In communicating this point of view an individual is not only telling us something meaningful about their own personal experience, but in that telling is expressing their own sense of themselves as an individual. If this sense of self is constituted as "an actual event which exists in its own right" (Brown, 1999) then it becomes something which is measurable.

Central to q methodology, both from a conceptual and a methodological perspective, is 'self-significance'. It is self-significance which is the unit of measurement and which allows a meaningful statistical analysis and interpretation of data take place. The process of measuring self-significance begins by presenting participants with a concourse of statements which have been gathered representing a diversity of statements and opinions with regard to a particular subject matter. Participants are asked to rank the statements in their order of preferences, ranging from those statements which they most agree with to those which they least agree with. The statements are usually, but not always, ranked by the participants using a quasi-normal distribution matrix, the range of which depends on the number of statements and the kurtosis of the distribution. By the end of this process participants will have produced a complete 'sort' or 'distribution' of their own views and opinions of the statements presented to them – the 'sort' is an expression of their own subjectivity. What each participant produces is a visual representation or expression of their own subjectivity but based on a common unit of measurement - the 'self-significance' of each statement.

Once the unit of measurement is consistent between the various participants, then a complete statistical analysis of the sorts is feasible utilising correlation, factor analysis, and the computation of factor scores. Once each individual has completed their ranking (or q sort) of the statements, each q sort is entered into a statistical software package which has been specifically developed to conduct a factor analysis on the responses given. First, a correlation matrix is produced which enables each individual q sort to be compared with each of the other q sorts. This correlation matrix is then factor analysed (an unrotated factor matrix) to enable natural groupings of q sorts to emerge, i.e. those q sorts which are most similar or dissimilar to each other. In other words, those participants who have similar views will emerge as 'loading onto' or sharing the same

factor. These original factors are further ‘rotated’ to enable the final set of factors to be derived. Finally, before each factor can be described and interpreted, each factor score and difference score is identified. The factor score enables a ‘composite’ or ‘idealised’ q sort to be produced.

Q methodology was chosen for this research for two clear reasons. Firstly, the researcher wished to ensure that the quantitative approach utilised was consistent with the overall constructionist epistemology adopted within the research. As we have seen in Chapters 1 and 2 the researcher has adopted a discourse analysis approach in exploring firefighters’ discursive formations of their own subjectivity, the work that they do, and how they construct and deal with the incidents that they encounter. Discourse analysis was specifically chosen to enable the researcher to explore questions about discourse, subjectivity, practice and “the material conditions within which such experiences may take place” (Willig, 2008, p.113). When researching this same subject matter from a quantitative perspective, the researcher wished to choose a statistical method which is both respectful of, and consistent with, the overall discursive theoretical framework utilised in Chapter 2. As Watts and Stenner (2005) state:

> Q methodological studies in this modern tradition often present rich and holistic interpretations of the various factors exemplifying q sorts. This allows such studies to both identify and explicate a finite number of distinct subjective points-of-view relating to the topic at hand. (p72)

A further reason for choosing a q methodology relates to the overall objectives of the research, which is to produce a set of recommendations for an alternative approach towards firefighters, so that it is not just informed by what the participating firefighters thought about the critical incident, but is also rooted in their own experiences of

themselves as firefighters. It was essential therefore that a method was chosen which did not attempt to formulate or package the experiences of the participants into the researcher's existing schema of what he thought they needed. Q methodology enables such an objective analysis of human subjectivity to take place. As McKeown and Thomas (1988) state: "central to q methodology is a concern with ensuring that self-reference is preserved rather than compromised by or confused with an external frame of reference brought by an investigator" (p.5).

However, q methodology is not without its problems and critics. On a very practical level, administering the q sorts can be a time-consuming process, especially when it is conducted with groups of participants (as in this case). Some participants are quicker than others. Some give more detailed accounts of their q sorts, where others find their sorts more difficult to explain. Questions have been raised with regard to the reliability of q methodology, given that the process does not necessarily yield the same results when repeated (Stainton Rogers, 1995). Brown (1980) argues that q sort can be replicated with up to 85% consistency. The potential for a high degree of researcher bias is a further criticism often made of q methodology. This bias can be reflected both in the selection of items for inclusion in the q sort, along with the potential for bias in the analysis phase. As Pope, Ziebland and Mays (2000) argue, moving the analysis of the data towards the formulation of hypothesis or propositions requires a great deal of skill on the part of the researcher.

5.3 Participants

Forty individuals participated in the study, each of which was an active member of the retained Fire Service in Ireland. All were males, and their ages ranged from 26 to 55 years of age. The average length of service among participants was 12 years.

5.4 Procedure

The researcher compiled a list of 69 statements which were drawn from the typed extracts of the group discussions undertaken in Study 1. These statements were selected from the range of opinions expressed by participants with regard to their experiences of the incidents which firefighters encounter during the course of their work; their reactions to these incidents; the supports available to them from within the crew and provided to them by the critical incident stress management service; and their sense of themselves as firefighters. The Researcher highlighted excerpts each of the transcripts which reflected a particular position in relation to each of the research questions investigated in Study 1 (Chapter 4 in this thesis). This generated an overall bank of 104 statements (Appendix 7). This bank was further reduced by means of eliminating any duplication either within or between those statements. In addition, statements were eliminated if the point they made, although interesting, was difficult to express succinctly. For example, statement 35 in the preliminary concourse (Appendix 7) says "I think a part…well not a problem…we're battle hardened most of us at this stage". This statement incorporates a number of interesting points as to whether or not experience can be helpful or a problem. It suggests that fire fighters can become weary, or develop defenses. The subtle complexity of the point, although of interest was too

difficult to encapsulate and there statement was therefore cut from making the final concourse.

This reduced bank was further reviewed by the Researcher to see what view points were absent or missing from the views expressed. This led the Researcher to formulate a number of statements which were not expressed by participants in Study I but which contained a view point that reasonably could be asserted regarding the research question at hand. These statements were informed by the Researchers own reading of the CISM literature and were introduced in order to ensure that views not expressed by participants were still available for consideration by participants. For example statement 33 in the final concourse of statements (Appendix 8) states "I think all this talk about stress and trauma is a load of nonsense". While no participant ever said this statement, at times the Researcher surmised that it was a reasonable thought for some participants to have who may have been unfamiliar with the concepts of come from a perspective that has little time for such emotional concepts. This statement was formulated and included by the Researcher to give voice to such a perspective even though the words had not been said by any participant. At the end of this process a pool of 69 statements was available for inclusion in the concourse of statements for participants to consider. Once the statements were generated they were then balanced to ensure that they reflected both positive and negative phraseology, while at the same time ensuring that each statement on its own made sense both linguistically and conceptually. Each statement was numbered and typed onto a small card and laminated for durability purposes. As participants were going to be conducting their q sort in groups, fifteen packs of laminated cards were produced.

The study was conducted during the participants' scheduled training. An introduction to the research was provided by the researcher and participants were given the choice to opt in or out of the process. All the firefighters chose to participate.

To begin with, each participant was provided with a pack of statement cards and told that the first step of the exercise was to sort the statements into three piles on the desk in front of them – one pile to contain all the statements they agreed with, the next for those statements they disagreed with, and the third pile for those statements they were unsure about i.e. that they could neither agree or disagree with. Participants were encouraged not to think too much about this initial sorting, but to allocate the cards according to their initial gut reaction to the statements contained therein.

Once each participant had completed this part of the process, they were given a statement array chart, which consisted of a fixed quasi-normal distribution whereby the 69 statements could be ranked from -5 to +5 by the participants (Table 1). This range was to help them identify those statements they disagreed most with (-5), through to those statements which they agreed strongly with (+5). The remaining statements were to be ranked according to the degree of agreement (+5) or disagreement (-5). The statements which participants felt neutral about would be in the middle of the distribution (0). The reason 69 statements were formulated was because the researcher wished to ensure that a broad range of both positive and negative statements were included in the sort; that some of the statements utilised were stated in the form of inverted negatives, requiring some thought on the part of the participant; and that there was a sufficient range and depth to each q sort. A blank chart onto which they could place the cards was designed both for ease of movement of the statements between values for the participants as they evaluated each statement, and to provide a complete

visual of each person's final sort once they had completed the process. At this point participants had produced a complete, single configuration of their own subjective evaluation of the statements.

Table 1: The fixed quasi-normal distribution utilised in the study. The figures in brackets indicate the number of statements which were assigned to each ranking.

-5	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**
20	13	36	28	31	1	14	21	30	3	19
2	24	53	44	6	52	64	7	29	25	35
18	42	5	65	57	16	34	54	43	49	8
37	56	66	15	32	41	4	23	12	50	67
(4)	38	48	55	17	22	63	59	68	69	(4)
	(5)	(5)	27	45	58	46	61	(5)	(5)	
			47	39	26	60	51			
			(7)	11	62	10	(7)			
				(8)	33	(8)				
					40					
					9					
					(11)					

The final stage of the process involved each participant being asked about the sort which they had produced. They were asked to comment on which statements struck them the most; if there were any statements which they would have liked to have seen included; or if there were any particular statements which they had difficulty with. These comments were noted by the researcher and contributed to opening up a further discussion of the topic among participants.

5.5 Software Package & Analysis

A software package called PQMethod (Atkinson & Brown 1980) was used to analyse the data obtained from the qsorts. This is a free programme, available on line, which is specifically designed to conduct an analysis of the information produced by the individualised sorts of up to 200 participants. All the instructions for its use are available on line with the software package.

Once the individualised qsort from each participant had been entered into PQMethod it produced a correlation matrix (Appendix 9) between all of the sorts. This identified the level of disagreement between each of the individualised sorts produced by the 40 participants. Next, this correlation maxtrix is subject to a factor analysis, the objective being to identify the natural groupings of the various qsorts. The factor analysis in Q methodology does not seek to cluster the statements which were most alike, but instead is seeking to cluster those people who most closely ranked the statements in a similar pattern, and it this this pattern of statements which reflects a subjective viewpoint of those people. Participants with similar views will share the same factor. The PQMethod produced an unrotated factor matrix which identified seven factors which is the default number for extraction for PQMethod. The eigenvalues and variance reported in this unrotated factor matrix suggest that there had been a high loading onto one factor (Eigenvalue 25.22, Variance% 63), whereas the other factors indicated a relatively low loading with eigenvalue scores in the range of 0.1 to 1.7 and variance scores in the 3 to 4% range. Only those factors with eigenscores above 1 were retained in keeping with Kaiser-Guttman criterion (Watts and Stenner 2012).

As the Researcher wanted to explore the majority viewpoints of the group as distinct from any particular viewpoint (such as those of the Station Officers) a varimax rotation rather than a "by-hand" rotation was conducted. The varimax rotation seeks to identify those factors for which each individual qsort has a high factor loading. It furthermore enables defining sorts be identified through the placing of an x next to that particular sort. In terms of this research four factors emerged as a result of the varimax rotation, and togther these four factors account for 74% of the study variance.

The final step of the analysis is the production of the factor arrays for each of the four factors identified. This factor array indicates the position of each particular statement in accordance with their relative position in the overall qsort as produced by the statistical analysis completed by PQMethod (Factor Qsort Value For Each Statement). The factor array for each factor is contained in Appendix 10. However, in keeping with Watts and Stenner (2012) suggestion a table form is also included (Table 2) to aid interpretation the factor arrays. It is these factor arrays that form the basis of the basis of the qualitative and quantitative interpretation of results.

Table 2: Rankings of each statement by factor with the highest position of each statement underlined and in bold font, and the lowest position is in bold font.

Statement	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
1. Firefighters should always be offered professional counselling support after each call-out involving a fatality.	-4	**-5**	**-3**	-4
2. Over time you become hardened to the incidents you see at work.	**4**	1	**-1**	2
3. I can't depend on other members of my crew to support me during an incident.	**-5**	**-5**	**-5**	**-5**
4. Seeing a dead body does not upset me.	2	**4**	2	**0**
5. It is not appropriate to discuss your feelings in front of other crew members.	**-2**	**4**	1	-1
6. Seeing a person suffering upsets me.	**-1**	1	0	**1**
7. Being upset after an incident is a sign of weakness.	-3	-3	**-4**	**-2**
8. Dealing with critical incidents is not the most	**5**	3	**-4**	**5**

difficult part of a firefighter's job.				
9. Dealing with members of the public at an incident can be upsetting.	**0**	**-1**	**0**	**0**
10. The more experience and training you have the better you become at dealing with critical incidents.	4	**1**	3	**5**
11. I don't tend to talk about the incidents with my family members.	**-4**	-3	-3	**1**
12. Talking with other crew members helps me if I feel upset by an incident.	**0**	**5**	**0**	2
13. I feel good about myself once I believe that I've done a good job at an incident.	3	**2**	**2**	**4**
14. 'Black humour' is an important way of dealing with an incident.	**1**	**1**	2	**3**
15. Being a firefighter doesn't make me feel particularly good about myself.	**-5**	**-4**	**-5**	**-4**
16. If I feel upset about an incident there is someone at work that I would talk with about it.	0	**-1**	0	**3**
17. Not everyone is cut out to be a firefighter	**-2**	**-1**	**-2**	**-1**
18. If you feel upset about an incident then you shouldn't be in the job.	**-4**	**-4**	**-4**	**-2**
19. Having good equipment and knowing how to use it makes me feel good about myself.	**3**	**0**	**3**	**4**
20. Stress is part and parcel of every job.	**2**	**2**	**-1**	1
21. Experiencing some stress helps me perform better.	2	**5**	**-1**	0
22. Helping others is one of the main reasons I like being a firefighter.	1	**5**	4	**0**
23. The incidents I have encountered through my work have upset me greatly.	**-3**	**-4**	**-4**	**-3**
24. I am less likely to feel sympathy for a casualty if	0	0	**5**	**-1**

they have caused an accident through their own actions.				
25. I would find it more difficult if I came across an incident while off duty.	**-2**	**1**	**-2**	0
26. The better I get on with my colleagues the more able I am to deal with incidents.	0	**-2**	1	**3**
27. Knowing who a casualty is makes responding to an incident more difficult.	**5**	**1**	4	4
28. I always wanted to be a firefighter.	**1**	**-4**	-3	0
29. I believe my colleagues would think less of me if I went to see a Counsellor after an incident.	-1	0	**1**	**-2**
30. Being watched by the public as I do my job can place more pressure on an already difficult situation.	**-2**	**2**	**-2**	-1
31. It is better to block incidents out of your mind than talk about them with others.	**-2**	**-2**	**0**	**-2**
32. Hearing colleagues talk about incidents they have dealt with helps me prepare for similar incidents.	0	**-1**	**1**	**-1**
33. I think all this talk about stress and trauma is a load of nonsense.	-1	**3**	-2	**-4**
34. We managed to deal just as well with incidents before the introduction of a Critical Incident Stress Management (CISM) programme.	**-2**	**0**	-1	**-2**
35. Talking among ourselves is the most effective way of dealing with the impact of an incident.	**1**	**1**	**1**	**4**
36. How you react to an incident depends very much on how you feel on the day itself.	**3**	2	**5**	5
37. The most stressful thing is a piece of equipment not working.	**4**	**4**	**4**	**5**

38. An RTA with dead people is the easiest RTA you can go out to because there's no panic.	2	**4**	3	**0**
39. Going for a meal or a drink with the crew after an incident helps enormously.	**1**	0	3	**4**
40. Dealing with blood and gore is the most difficult aspect of a firefighter's job.	**3**	-3	**-4**	-3
41. Looking out for and looking after each other is crucial in this job.	0	**-1**	**3**	1
42. Once you know what you're dealing with you can usually manage to deal with it OK.	**4**	3	**4**	**2**
43. It shouldn't be compulsory to participate in a group discussion after an incident.	**2**	**0**	1	**0**
44. After an incident I tend to question myself to see if I could have done any better.	**0**	1	**5**	2
45. When you arrive at a scene you go into work mode so you don't have time to work out if anything stressful is happening.	**5**	**5**	4	**2**
46. Trying to anticipate what's ahead of you as you go to an incident can be more stressful than actually being at it.	**-1**	**-1**	**0**	**-1**
47. An incident which is ongoing (e.g. house fire, chemical spills) puts you in greater danger and is therefore more demanding to deal with.	**5**	3	**2**	3
48. Once your own life isn't in danger, most incidents can be straightforward to deal with.	3	**0**	**5**	3
49. I can feel sad and upset after an incident but not stressed.	1	**-2**	**2**	1
50. Your first dead body is the worst one you're going to	**0**	**-3**	-1	**-3**

be at.				
51. There is no great comfort in being part of an effective crew.	**-5**	**0**	**-5**	**-5**
52. As soon as the pager goes off you prepare yourself to deal with the worst situation.	**-1**	**-1**	**0**	**-1**
53. You seem to bury incidents in the back of your mind. You stow them away. It doesn't affect you but it's there.	**2**	-2	1	**0**
54. It's nice to know that there's a support programme in place for firefighters. You never know when you might need it.	**0**	**2**	2	1
55. I wouldn't know if a member of my crew wasn't coping well after an incident.	-4	**-1**	-3	**-5**
56. I would be reluctant to seek help from a Counsellor.	**-3**	**2**	-2	**-3**
57. Seeking counselling is a sign of weakness.	**-3**	**-2**	**-2**	**-2**
58. Talking about how I feel in front of other crew members is very difficult.	**-1**	**3**	**-1**	**1**
59. A Counsellor should drop by the crew once a year to see how they are doing.	-2	-3	**0**	**-4**
60. A good strategy to deal with stress is to block incidents out of your mind.	**1**	**-2**	0	**-2**
61. You expect to come across difficult situations in this job.	**4**	**4**	**1**	2
62. I enjoy being a firefighter because the money is very good.	**-5**	**-5**	**-5**	**-5**
63. Debriefing discussions should address training needs as well as psychological needs.	**-3**	**-5**	**-3**	**-3**
64. An essential part of being a firefighter is to keep up with new techniques and procedures.	**2**	**0**	**2**	**2**
65. You can tell an effective	**-4**	**-4**	**-1**	**-4**

crew by the care and attention they pay to their rig and equipment.				
66. I'm very happy with the way the current debriefing programme is structured.	**-1**	**0**	**-1**	**0**
67. I'd be happy to talk with a Counsellor if I was feeling stressed.	0	**2**	**-2**	1
68. Part of a firefighter's job is to take care of their own health and well-being , to maximise their effectiveness at work.	**1**	**-2**	0	0
69. Firefighters need to be mentally well to be effective in such a high risk job.	**-1**	**0**	**0**	**-1**

Once all the statistical workings has been completed and the factor arrays for each factor has been produced, the final stage of the analysis involves interpreting the "key viewpoint" (Watts and Stenner, 2012, chapter 7) captured by each factor is interpreted. This is done first in a quantitative form, and second in a qualitative interpretation. Looking at each of these approaches in more detail:

(1) Quantitative Form:

Table 2 shows how each statement has been assigned to the 'factor exemplifying' q sort. Looking down each column of the four factors will show where each statement has been positioned in the exemplifying q sort. For example, in Factor 1, statement one has been positioned at -4, statement two at -1. Reading along the table by row, will show where each statement has been positioned across each of the four factors. In addition, the highest and the lowest positions assigned to each statement have been highlighted - the highest position underlined and in bold font, the lowest position in bold font.

(2) Qualitative Interpretation

While Table 2 indicates the positioning of each statement within each of the exemplifying factors, it is equally possible to extrapolate a narrative form from the data (Harvey, Agostinelli & Weber 1989; Antaki, 1987). In this narrative form each of the factors is treated as a whole or a 'gestalt'. In looking at each factor as a gestalt, interpretations and meanings emerge which communicate the overall sense of the factor. The narrative has been derived from a careful reading of each factor by the researcher and is supported by reference to the position of the statements within each factor.

In addition to looking at each statement and its relative position on the each factor array, the statement which the PQMethod had identified as "distinguishing statements" were particularly explored. Distinguishing statements are those statements (items) which loaded on one particular factor in a significantly different fashion to the other three factors. These items are of interest because they highlight the differences (and indeed similarities) between factors, but and over-relatiance on then during interpretation can take from a wider interpretation of the overall viewpoint reflected in the factor. The distinguishing statements for each factor are contained in each factor interpretation in the text.

The ranked statements which had been selected by the researcher to inform particular constructions are numbered in the narrative text. For example (60:+4) refers to statement 60 which had been ranked +4 in the factor and which had been drawn upon by the researcher in his interpretation. In addition, the narrative produced by the researcher was further supplemented by the comments

expressed by the participants who loaded heavily onto the factor and whose comments had been gathered by the researcher in the immediate aftermath of completing their own individual sort. Only those comments which in some regard shed further light on both the factor and its subsequent narrative construction have been utilised in the text. A complete set of the comments made by the participants and recorded by the researcher is contained in Appendix 11. While the researcher has endeavoured to provide a narrative which captures the gestalt of each factor it has to be acknowledged that such a formulation in story form is always provisional and open to further interpretation. However, the researcher is confident that the narratives provided represent a considered and detailed analysis of the views expressed by participants at a particular point in time.

5.6 Results

5.6.1 Factor A – Coping as a Learning Process

Demographic Summary: Factor A explains 14% of the sample variance and has an eigenvalue of 5.6. This factor has four significantly loading participants. All four are male with an average age of 32 years, and with an average length of service of 12 years working as a firefighter. As no distinction was made for rank in the assessment it is not possible to say whether these loadings were from the more senior officers within the crew (e.g. Station Officers, Assistant Station Officers). However, with an average service of 12 years these loadings reflect the viewpoint of experienced staff members. Overall there were five distinguishing (defining) statements, with three being significant at .05 level, and two being significant at .01 level.

Statement	Factor A Rank	Factor A Score	Factor B Rank	Factor B Score	Factor C Rank	Factor C Score	Factor D Rank	Factor D Score
The incident which is ongoing puts you in greater danger and is therefore more demanding to deal with.	**5**	**1.79**	3	0.95	2	0.96	3	1.21
Over time you become hardened to the incidents you see at work.	**4**	**1.48**	1	0.73	-1	-0.44	2	0.51
Dealing with blood and guts is the most difficult aspect of a fire fighter's job.	**3**	**1.08***	-3	-0.90	-4	-1.53	-3	-1.17
You seem to bury incidents in the back of your mind. You stow them away.	**2**	**0.87**	-2	-0.66	1	0.23	0	-0.09
Your first dead body is the worst one you're going to be at.	**0**	**0.18***	-3	-1.54	-1	-0.56	-3	-1.16

Table 3: Distinguishing statements for Factor A. Items with an * indicates significance at P < .01.

Interpretation: Factor A identifies coping with incidents as being something which every firefighter will learn and develop through a combination of training, exposure, and the support of their crew and family members. There are occasions such as when dealing with your first dead body (50:0), or blood and gore (40:+3), or an ongoing incident which puts the firefighter directly at risk (47:+5) which are to be expected as part of the job (61:+4). These situations serve as learning opportunities (10:+4) which allow the individual firefighter to develop their own personal style of dealing with their reactions, be it a process of forgetting about the incidents (53:+2) or of developing a tough exterior and not allowing the incident to penetrate (2:+4). There are particularly difficult incidents for them – those which are ongoing and have the potential to injure them or take their own life (47 +5). As Participant 91 added, it is just as important for

the individual themselves, as it is for the crew and for the casualty, that they "have the chance to see it up front and learn how to deal with it". The firefighter, however, is not an isolated figure but draws strength from their identity as a firefighter (15:-5) and from the dependability within the crew (3:-5) and comfort which being part of the crew provides (15:-3). The shared experience of being in a crew creates both an understanding of what each individual is like within the crew (55:-4) and an acceptance that reactions are understandable both in the context of the individual (7:-3) and the incident which they encountered (18:-4). As Participant 98 stated "sure we all know what it's like but you have to get on with it yourself like. We can be there but we can't do it for you."

5.6.2 Factor B – Coping As A Professional Identity

Demographic Summary: Factor B explains 15% of the sample variance and has an eigenvalue of 6.0. This factor has six significantly loading participants. All six are male with an average age of 29 years, and with an average length of service of eight years working as a firefighter. With an average length of service of eight years it would suggest that participants loading onto this factor were "newer" recruits into the service – people at the relatively early stages of their fire fighting career. Overall there were 21 defining statements, with 10 being significant at .05 level, and 11 being significant at .01 level.

Statement	Factor A		Factor B		Factor C		Factor D	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Talking with other crew members helps me if I feel upset by an incident.	0	1.11	**5**	**1.52***	0	0.66	2	0.65
Experiencing some stress helps me perform better.	2	0.53	**5**	**1.25**	-1	-0.50	0	0.12
It is not appropriate to	-2	-0.74	**4**	**1.08***	1	0.23	-1	-0.43

discuss your feelings in front of other crew members.								
Dealing with critical incidents is not the most difficult part of a FF's job.	5	1.71	**3**	**1.02**	-4	-1.56	5	1.70
I think all this talk about stress and trauma is a load of nonsense.	-1	-0.37	**3**	**1.02***	-2	-0.60	-4	-1.25
Talking about how I feel in front of other crew members is very difficult.	-1	-0.61	**3**	**0.91**	-1	-0.37	1	0.39
I'd be happy to talk with a Counsellor if I was feeling stressed.	0	-0.08	**2**	**0.90***	-2	-1.00	1	0.18
I would be reluctant to seek help from a Counsellor.	-3	-1.15	**2**	**0.85***	-2	-0.89	-3	-1.12
Being watched by the public as I do my job can place more pressure on an already difficult situation.	-2	-0.74	**2**	**0.77***	-2	-0.60	-1	-0.24
I would find it more difficult if I came across an incident while off duty.	-2	-0.77	**1**	**0.57**	-2	-0.60	0	0.02
Knowing who a casualty is makes responding to an incident more difficult.	5	1.79	**1**	**0.55***	4	1.43	4	1.52
The more experience and training you have the better the better you become at dealing with critical incidents.	4	1.29	**1**	**0.53**	3	1.11	5.	1.74
Having good equipment and knowing how to use it makes me feel good about myself.	3	1.11	**0**	**0.47**	3	1.10	4	1.52
There's no great comfort being part of an effective crew.	-5	-1.84	**0**	**-0.23***	-5	-1.74	-5	-1.49
I wouldn't know if a member of my crew	-4	-1.48	**-1**	**-0.38***	-3	-1.11	-5	-1.72

wasn't coping well after an incident.								
I can feel sad and upset at an incident but not stressed.	1	0.47	**-2**	**-0.65***	2	0.61	1	0.32
You seem to bury incidents in the back of your mind. You stow them away. It doesn't affect you but it's there.	2	0.87	**-2**	**-0.66**	1	0.23	0	-0.09
Part of a FF's job is to take care of their own health and wellbeing to maximise their effectiveness at work.	1	0.24	**-2**	**-0.74**	0	-0.05	0	-0.12
The better I get on with my colleagues the more able I am to deal with incidents.	0	0.05	**-2**	**-0.77***	1	0.35	3	1.32
I always wanted to be a FF.	1	0.31	**-4**	**- 1.67**	-3	-1.02	0	-0.09
Debriefing discussions should address training needs as well as psychological needs.	-3	-0.95	**-5**	**- 1.73**	-3	-1.15	-3	-1.21

Table 4: Distinguishing statements for Factor B. Items with an * indicates significance at P < .01.

Interpretation: In Factor B, coping with incidents is something which is emergent from not just how the crew tends to engage with each other during and after an emergency, but equally is provided by the skill, experience and identity which being a member of a fire crew and the Fire Service provides. The crew understandably remains the primary source of support as they chat and talk about the incident (12:+5) (3:-5). The better the relationships within the crew the greater the capacity to emotionally deal with the emergencies they encounter (26:-2). However, the crew is not always capable of providing the support that is felt to be needed (51:0) and there is a discomfort at speaking about feelings with other crew members (5:+4) (58:+3). There is equally an

ambivalent attitude towards what is seen as being outside the crew, be that seeking help from a counsellor (56:+2) (67:+2) or being watched by members of the public as they do their job (30:+2).

Coping with incidents within Factor B is constructed as a process which emerges from being part of a fire crew itself. There is an awareness that coping with an incident is something that they share in common (55:-1) (68:-2) but is ultimately seen as an individual process (53:-2) and it is not appropriate to engage in emotional talk between crew members (58:+3) (5:+4) of the social process within the crew itself. The concept of their reactions being a form of stress is not reflected in the factor (33:+3), but stress is seen as being helpful in enabling them to perform more effectively (21:+5).

Factor B suggests that the firefighters are better resourced at dealing with incidents which they encounter within the work domain rather than outside (25:+1). Within work the incident is presented as not being particularly difficult (8:+3), that it is expected (61:+4); and that they know what to do when they arrive at a scene (45:+5). They are there to help (22:+5) but not vocationally driven to be a firefighter (28:-4). Participant 112 elaborated on this point during the post q sort discussion when he stated that "you definitely feel under pressure to get the guy out, but you know you can do it. Even if it does no good for him (implying that the casualty dies) you know that you did all you could."

5.6.3 Factor C – Coping as Sense Making

Demographic Summary: Factor C explains 21% of the sample variance and has an eigenvalue of 8.4. This factor has eight significantly loading participants. All eight are male with an average age of 29 years, and with an average length of service of 10 years working as a firefighter. This demographic suggests that those participants loading on this factor are relatively experienced firefighters but who are still relatively young age wise. Overall there were 16 defining statements, with 5 being significant at .05 level, and 11 being significant at .01 level.

Statement	Factor A		Factor B		Factor C		Factor D	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score
After an incident I tend to question myself to see if I could have done any better.	0	0.05	1	0.58	**5**	**1.67***	2	0.69
I am less likely to feel sympathy for a casualty if they have caused an accident through their own actions.	0	0.16	0	0.33	**5**	**1.52***	-1	-0.24
Going for a meal or a drink with a crew after an incident helps enormously.	1	0.21	0	0.45	**3**	**1.04**	4	1.53
Looking out for an after each other is crucial to this job.	0	0.00	-1	-0.34	**3**	**0.99***	1	0.33
I believe my colleagues would think less of me if I went to see a Counsellor after an incident.	-1	-0.58	0	-0.26	**1**	**0.29**	-2	-0.87
It is not appropriate to discuss your feelings in front of other crew members.	-2	-0.74	4	1.08	**1**	**0.23***	-1	-0.43
It is better to block incidents out of your	-2	-0.74	-2	-0.73	**0**	**0.06***	-2	-0.62

mind than talk about them with others.							
A Counsellor should drop by a crew once a year.	-2	-0.87	-3	-0.98	**0**	**0.06***	-4	-1.25
Stress is part and parcel of every job.	2	0.74	2	0.81	**-1**	**0.21***	1	0.49
You can tell and effective crew by the care and attention they pay to their rig and equipment.	-4	-1.27	-4	-1.73	**-1**	**0.39***	-4	- 1.32
Over time you become hardened to the incidents you see at work.	4	1.48	1	0.73	**-1**	**-0.44***	2	0.51
Experiencing some stress helps me perform better.	2	0.53	5	1.25	**-1**	**-1.50**	0	0.12
Your first dead body is the worst one you're going to be at.	0	0.18	-3	-1.54	**-1**	**-0.56**	-3	-1.16
I'd be happy to talk with a Counsellor if I was feeling stressed.	0	-0.08	2	0.90	**-2**	**-1.00***	1	0.18
I always wanted to be a FF.	1	0.31	-4	-1.67	**-3**	**-1.02**	0	-0.09
Dealing with critical incidents is not the most difficult part of a FF's job.	5	1.71	3	1.02	**-4**	**-1.56***	5	1.70

Table 5: Distinguishing statements for Factor C. Items with an * indicates significance at P < .01.

Interpretation: Coping, in Factor C, considers how firefighters both individually and collectively have the opportunity to evaluate, talk and make sense of the incident. The incident is a discursive object which can be critically evaluated, and where a casualty is perceived to have contributed to the incident is judged less sympathetically (24:+5). There is a further process of self-evaluation whereby the firefighter judges himself, as to how he believes he performed on the day (44:+5) (25:+5). Both of these are informal processes which can take place within a social context such as having a meal after an incident (39:+4). These social events serve a purpose and are an important part of the

support they give each other (41:+3) (51:-5) and tend to be an opportunity whereby a firefighter can informally deal with their stress (20:-1), talk about the dead body (50:-1) and 'move on' from the incident (2:-1). However, the talk is not about feelings – these discussions are not forums in which feelings are to be expressed and explored (5:+1) . Their colleagues that a crew member is seeking counselling (29: 1) is still considered problematic as is expressing feelings in front of other crew members (5:+1). They can be seen as a form of maintenance for the crew, akin to the maintenance they give their rig and equipment (65:-1).

This factor further suggests that dealing with critical incidents can be a concern for those participants loading onto this factor (8:-4) and that dealing with such incidents is not as easy to get used to (50-1). The preferred coping mechanism appears to through the social support of the crew (41:=3), although not letting them know if a crew member is experiencing a problem (5:+1). Reaching out for professional counselling support is not regarded as being a ready solution (59:0) (67:-2).

Throughout the informal discussions, after the data collection sessions, the researcher was struck with how the participants saw the incidents as their areas of expertise. While they were well aware of the tragedy and loss that could be involved for people, it was the how of the incident – how it was caused, how the casualty ended up in that particular way, how the injuries were sustained, how they extracted the casualty, how they dealt with the challenges they encountered, how they would deal with a similar situation in the future – which was the type of questioning and language which they engaged in. It struck the researcher that Factor C is the one which most closely captures the sense of completeness from the crews. As Participant 110 said "every incident can

be sad or lucky in its own way. What I need to know is how I can help as best as I can. I can't worry about the other stuff."

5.6.4 Factor D – Individual and Crew Effectiveness

Demographic Summary: Factor D explains 24% of the sample variance and has an eigenvalue of 9.6. This factor has eight significantly loading participants. All eight are male with an average age of 30 years, and with an average length of service of 11 years working as a firefighter. These demographics suggest that those participants who loaded onto this factor are experienced fire fighters. Overall there were 11 defining statements, with five being significant at .05 level, and six being significant at .01 level.

Statement	Factor A		Factor B		Factor C		Factor D	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Going for a meal or a drink with the crew after an incident helps enormously.	1	0.21	0	0.45	3	1.04	**4**	**1.53**
Taking among ourselves is the most effective way of dealing with the impact of an incident.	1	0.21	1	0.66	1	0.44	**4**	**1.40***
The better I get on with my colleagues the more able I am to deal with incidents.	0	0.05	-2	-0.77	1	0.35	**3**	**1.32***
If I feel upset about an incident there is someone at work that I could talk with about it.	0	0.05	-1	-0.45	0	-0.07	**3**	**1.21***
I don't tend to talk about the incidents with my family members.	-4	-1.40	-3	-0.90	-3	-1.13	**1**	**0.42***
Talking about how I feel in front of crew members is very difficult.	-1	-0.61	3	0.91	-1	-0.37	**1**	**0.39**

Seeing a dead body does not upset me.	2	0.79	4	1.24	2	0.88	**1**	**0.10**
I would find it more difficult is I came across an incident while off duty.	-2	-0.77	1	0.57	-2	-0.60	**0**	**0.02**
An RTA with dead people is the easiest RTA you can go to because there's no panic.	2	0.79	4	1.18	3	1.38	**0**	**-0.08***
If you feel upset about an incident then you shouldn't be in the job.	-4	-1.31	-4	-1.58	-4	-1.46	**-2**	**-0.63**
I think all this talk about stress and trauma is a load of nonsense.	-1	-0.37	3	1.02	-2	-0.06	**-4**	**-1.25***

Table 6: Distinguishing statements for Factor D. Items with an * indicates significance at P < .01.

Interpretation: Factor D could almost be best best described as the "social" factor as it presents the concept of the crew together providing the most effective means by which coping with incidents is greatly enhanced. Effectiveness is constructed both by reference to the skill and capacity of each individual firefighter to do the job which is required of him in each particular circumstance, and by reference to the quality of the relationships which exist within the crew allowing them to get on well together. The skill of performing the job well, be it through experience (10:+5), and having the right equipment that works (37:+5) (19:+4) contributes to the individual's own sense of satisfaction that they have done the job to the best of their ability (13:+4). The factor suggests that the situations they encounter make personal demands on them, but nothing that is outside their own scope, or indeed the scope of most people (18:-2) (4:0) (17:-1), to deal with.

Factor D equally constructs effectiveness by reference to the quality of the relationships which exist between the crew members themselves. There is a great deal of talking between the crew members about the incident (35:+4), the meal which can take place after an incident (39:+4), and each contributes to the capacity of the crew to deal with the challenges they are faced with (26:+3).

Statements which negate the significance of crew support and effectiveness are rejected (3:-5), (51:-5), (55:-5). A number of the participants made reference to this during the informal discussions as part of the q sort process. Participant 102 referred to how the quality of the relationships within the crew was "the most important thing no matter what the 'shout' is...it's these boys who'll get you through it." As Participant 115 put it "I know that everyone here will go through hell on earth to make it all alright – so what more can I ask for."

5.7 Discussion

In this study the q methodology has enabled the subjective experiences of firefighters to be systematically explored in a way which captures their richness and nuance. Four distinct factors have emerged, each of which has been explicated by means of a narrative account based on both the overall structure of the idealised sort and with regard to the distinguishing statements within each factor. Further richness has been added by means of the use of quotes gathered from the post q sort discussions between the researcher and the participants. Such an approach provides an opportunity to explore the experiences of firefighters with regard to how they deal with the incidents from a 'bottom-up' rather than a theory driven perspective. Any attempt to capture subjectivity is a difficult challenge. While 26 participants loaded onto one or more of the four

factors, this still in effect means that 14 participants did not load onto any of the factors. This highlights the fact that there is still a great deal yet to be learnt about the experiences of firefighters than has been captured through this research. It highlights the scope which exists for further research, using q method as a means of understanding how firefighters understand themselves and the nature of the work they do. Unlike many other statistical techniques there is no attempt to extrapolate from this one sample out to the wider population of firefighters, but there is a depth to the findings which will resonate with firefighters throughout Ireland.

In terms of this research four factors emerged, lettered A to D, and each one summarised by means of summary title which attempts to capture the quality of each factor. The following section will discuss each factor in greater depth, specifically exploring how the insight gained from each factor can further inform and enhance the proposed intervention to be developed as a result of this research.

Factor A highlights how dealing with the incidents is an ongoing process, something which each firefighter needs to go through in order to learn. The factor captures this concept of the process - through each experience they are building up their own capacity, resources and effectiveness as a firefighter. As dealing with emergencies is an integral part of the firefighter's job then it is both in the self interest of the firefighter and the wider benefit of the crew that such a capacity develops. Factor A equally captures how the fire crew is there to help as part of this process – they are a resource which can support the individual and from which the individual can learn. However, only the individual can successfully integrate that learning for themselves.

The insight gathered from Factor A enables the researcher to conceptualise such learning as an important aspect of the professional development of firefighters, as it forms an important part of their professional competence in their role. The CISM model constructs support and help as something which happens 'after' the event; that it is in some way an additional support to be provided when the critical incident is overwhelming. Factor A, however, suggests that as coping is something which the firefighter learns or acquires through their experience then it is important that the learning process is attended to and given the recognition which it deserves. The new form of support therefore must not just start with providing new recruits and crew members with information about their psychological well-being, but must instead start with acknowledging how dealing with incidents is both a process of applying technical skill and attending to and learning from their own reactions to the incidents they encounter. It is apparent from Factor A that firefighters currently engage with this process of experience and understanding, that they are active in making sense of both the event and their own individual/collective reactions. Attending to such a dynamic process is a starting point for a new form of support. It changes the concept of well-being and support from a clinical framework to an operational framework and will help privilege firefighters own experiences and understanding over that of a psychological expert. The role of the Psychologist them becomes one of enabling the fire crew to identify the processes which help them to make sense of their own reactions to incidents rather than applying the precepts of a particular model of expertise.

Factor B explores how the identity of being a firefighter and a member of a fire crew provides the individual with a different orientation towards the emergencies which they deal with. They are not amateurs called to the scene of an incident, but have a purpose which they can fulfil by doing their job effectively. Although the Mitchell Model has

been specifically developed for firefighters, and has subsequently been applied to wider organisational and community contexts, such as workplace suicide or a terrorist bombing, it completely ignores the reason as to why an individual is caught up in an emergency situation. The member of the public could be there by virtue of bad luck and timing, and the firefighter could be there by virtue of either being a member of the public or in their capacity of providing emergency support as a firefighter. Factor B draws our attention that these are different psychological positions for the firefighter to be in. The firefighter is there by virtue of a particular purpose, not by accident. Regrettably, the Mitchell Model of CISM ignores such a positioning, in spite of the fact that it arose within the context of the Fire Services.

In Factor C, the process of sense making or storytelling which the firefighters themselves engage in, plays an important role in how they cope with the incident. This factor suggests that firefighters talk about the incident in ways which seek to make sense of the incident itself – they look for ways of understanding the circumstances surrounding the incident and how it occurred, who the casualty was, how the rescue proceeded. The ways in which they talk about the incident is what is significant within this factor, for example, understanding the how and why of the incident itself. The factor suggests that they do not talk about the incident in terms of how they relate emotionally with it – these are essentially private. They are aware of them, conscious of the need to look out for and after each other, but they do not wish to speak of their own emotional reactions and instead focus their talk on the 'story' of the incident.

Factor C forces us to question the appropriateness of the process of emotional ventilation which is intrinsic to the critical incident stress debriefing process. Expressing individual "thoughts, emotional reactions and symptoms" (Mitchell & Everly, 2001

p.93) in the presence of other crew members is how the debriefing is structured to proceed. It asks people to be emotionally disclosing in the presence of their colleagues so as to enable the "prevention of post-traumatic stress and PTSD among high risk occupational groups such as firefighters" (p.93). However, Factor C suggests that such disclosure is a somewhat alien process to fire crews, and accounts for how in Study 1 (Chapter 4) a number of participants reported that they engaged in the process for the sake of others but could not genuinely connect with it.

In developing a new form of support for fire crews, the insights gained from Factor C forces a questioning as to whether the focus on processing feelings has any intrinsic value for the crew members themselves. If, then, the preventative claims of the CISM model no longer hold any value, the question of what is to be gained from asking firefighters to discuss their emotional reactions to an incident needs careful consideration. The emotional ventilation theory of Blaney (2009) is equally questionable, given the fact that such emotional expression can be an alien process for the crew and may even serve to undermine individual and collective intra-crew relationships, as suggested by Factor C.

The final factor, Factor D, highlights how the professionalism and competence of firefighters in dealing with incidents significantly influences how they subsequently relate with the incident itself. There is a great significance placed on individual effectiveness and performance. It provides the individual with a sense of achievement - they did all they could for the casualty, no matter what the nature of that outcome is for the casualty (whether they lived, died, lost limbs etc.). It is that personal sense of having performed competently and professionally which provides a form of protection from the tragedy which has occurred to the casualty.

The insight to be gained from Factor D allows the researcher to propose a new dimension to the support to be provided to fire crews. The current debriefing model focuses on processing the individual's thoughts, emotional reactions and symptoms to the nature of the incident, thereby ensuring all questions relating to performance are excluded from the discussion. The Mitchell Model is very clear in differentiating the emotional debrief from the operational (usually referred to as the 'hot' debrief). However, as Factor D suggests, much of the emotional response of the individual firefighters actually relates to how effective they were in doing their job, and is not actually related to the tragic circumstances of the event itself. In many regards such an approach links very closely with the literature exploring sex differences in stress coping strategies. Pilar's (2004) of gender differences in stress and coping concluded that men were found to have more emotional inhibition than women. His research suggests that emotion-focused stress management was more utilised and favoured by women than by men. This would suggest that as an occupation predominantly populated with men, that emotional-focused support would be less preferable than other forms of stress support.

CHAPTER 6

DISCUSSION, CONCLUSION AND IMPLICATIONS FOR PRACTICE

6.1 Introduction

As a means of addressing the overall aims of the research, this chapter aims to integrate the key conclusions which were achieved through both the qualitative and quantitative studies and which can best inform the development of a support system for firefighters in Ireland. The chapter proceeds to consider the implications which these finding have for the practitioner working at an organisational level with the Fire Services, both in terms of the direction and advice which it can provide to the management of these services, as well as exploring the practical implications for those working with either fire crews or individual firefighters.

The chapter goes on to explore the limitations of the study through identifying what alternative research methods could be used; exploring any flaws in the research design; and proposing other issues which emerged during the study which warrant further investigation. The conclusion contains a general summary highlighting the possible influence which this research may have.

6.2 Summary of the Qualitative Study

The qualitative study undertook a discourse analysis of how the participating firefighters discursively construct a number of key factors relating to themselves and the work they do. Specifically, the study sought to explore their constructions of the critical

incident and their reactions to it; how they discursively constructed themselves as firefighters; and as a result of their constructs, to find a suitable support and psychological intervention.

A number of interesting constructs emerged from the discourse analysis. While the concept of the critical incident was not one they readily drew on, some emergencies were more challenging for them than others. A theoretically important conclusion to surface was that the emotional impact of an incident was more likely to emerge as a result of a firefighter's own individual and crew performance rather than as a result of the nature of the incident itself.

In terms of their own physical and psychological reactions the research suggests that the participants drew a strong distinction between stress and emotions. Stress tended to be constructed in physical terms, such as a shaking of the leg. This however, was more likely to be felt on the way to an incident rather than during it or after it. The language of emotions was readily drawn on, but in a naturalistic, non-problematic manner. Emotions tended to surface afterwards when the significance of the emergency emerged (such as the death of a child).

In terms of the constructions which they drew upon when discussing themselves in their role as firefighters, two theoretically important constructs materialized. Firstly, traditionally strong male concepts emerged – of being part of a unique brotherhood by means of membership of the Fire Services, and the concept of being of service within their community. The concept of brotherhood created both a strong bond and boundary, and informed an identity which was unique to, but shared by, firefighters throughout the world.

In terms of a suitable psychological intervention, conflicting constructs were drawn upon. Care for each crew member was an important construct to emerge, and that extended to the emotional sphere. However, there was a particular concern regarding the potentially stigmatising effects of being in need of psychological help. Again, notions of professionalism and masculinity were drawn upon to account for why crew members would be slow to take up on psychological support, or that their engagement with an intervention could be at a surface level rather than at any meaningful level.

6.3 Summary of the Quantitative Study

The q methodology sought to further investigate the subjective experiences of firefighters dealing with emergency situations, but using a quantitative approach. Four significant factors emerged, which were formulated into subject positions by the researcher based on the significant statements identified through the factor analysis.

The first factor succeeded in identifying coping as a capacity that was learned through the experience of dealing with different emergency situations. It is something that firefighters can develop over time, akin to growing a toughened exterior. Emergencies will be thought of and forgotten, and some will be memorable for particular situations.

Another factor relating to coping which emerged was one that expressed ‘sense making’, or meaning, as being an important part of how they dealt with an emergency situation. Meaning was something that emerged as the incident unfolded, and as the circumstances of the casualty became known. Often it was only afterwards, when the incident was spoken about socially and the identity of the casualty became known, that

an emergency response changed quality and became something with significance and meaning for the participating firefighters.

The third and fourth factors which emerged from the q methodology both related to how their experiences of being a firefighter impacted on their reactions to and experiences of dealing with emergency situations. Their professional identity as a firefighter was regarded as being a significant aspect to how they dealt with their own reactions to emergency situations. Being a firefighter positioned them as experiencing emergencies from a position of being the ones who could help in the situation – they know what to do, and they have the equipment which can help them. They contrasted this position with that of the non-firefighter general public, or with the times when they encountered emergency situations outside their role of firefighter. Their notions of professional identity strongly reflected a vocational element –their desire to be firefighters, and that their role involved actively helping people in difficult situations helped them deal with the most difficult of emergency situations.

The fourth factor to emerge from the q methodology was equally related to professionalism but from the perspective of being competent in the role of firefighter. Competence is seen as being a buffer against the emotional impact which an incident may have. Having the skill and capacity to do the job well, having the equipment and the experience of expertly using it, and knowing that they are able to do the best they can for the casualty, creates a space between both them, in their role as firefighter, and the casualty they are seeking to rescue or assist. The firefighters are 'of' the emergency but not immersed in their drama. This professional positioning offers a form of protection from the potential of the incident to have a negative emotional impact.

6.4 Integrating the Qualitative and Quantitative in Addressing the Research Question

This section seeks to integrate the significant insights gained from both the qualitative and quantitative studies. The significance for informing the theory and practice will be explored in the next section.

The overall research methodology was one of triangulation, where a research question was initially posited for investigation; a qualitative study utilising discourse analysis was conducted to identify key constructs relating to the research question; and these constructs were further corroborated, negated or refined through a quantitative study incorporating the use of q methodology. At this point it is important to explore how this research process has helped in understanding the research question first proposed.

The primary objective of the research was to understand how firefighters construct their own experiences of dealing with emergency situations, and to use this insight to inform the development of a psychological support system which has a salience and meaning for them. In seeking to address how well the research has succeeded in answering this question a two-step process is proposed. The first will look at combining the key insights gained through the two studies; the second will be a mapping of those insights onto the current support models (including the Mitchell Model) to identify what theoretical and practical recommendations are to be considered by practitioners.

Table 6.1 Mapping outcomes qualitative and quantitative with the Mitchell Model of CISM

	KEY CONSTRUCTS IDENTIFIED IN QUALITATIVE STUDY	**KEY FACTORS IDENTIFIED IN QUANTITATIVE STUDY**	**THEORETICAL AND PRACTICAL CONSIDERATIONS AND IMPLICATIONS**
THE CRITICAL INCIDENT	Responses are not always about the casualty Operational factors (how well the rescue went) emerged as a significant factor	Operationally, individual and crew performance critical	Current CISM model explicitly forbids any review of performance
THEIR OWN REACTIONS	Stress is regarded as being physical Emotional responses are varied and seen as something normal	Both meaning and 'sense making' are an important aspect of how an emergency is viewed Dealing with emergencies is something firefighters can learn	Meaning is imposed *a priori* on their reactions, thoughts and feelings as being signs and symptoms of stress
THEMSELVES AS FIREFIGHTERS	Significant concepts of brotherhood and traditional notions of masculinity emerged The firefighter as professional		Focuses on the firefighter as being a secondary victim of the incident, not as someone who made the situation better
INTERVENTION	Discussing feelings in a group context is problematic Obligation, pressure, to comply with the Mitchell Model	Informal crew friendship and support processes	Participation, while not compulsory is strongly advised and widely expected Structured, quasi-counselling format

There are a number of important points which emerge from the mapping exercise contained in Table 6.1, set out in more detail below.

6.4.1 The Incident as a Professional Work Performance

Both the qualitative and quantitative studies confirmed how the participating firefighters viewed the critical incident in a significantly different manner from that presented in the Mitchell Model. It is evident from the studies that the primary focus for the participating fire crews was the extent to which they used their professionalism to execute a successful outcome on behalf of the casualty. Their focus is firmly on using their skills and equipment rather than becoming involved in the tragedy which has occurred for the casualty, though reactions to that may come later.

This outcome has important implications for the very concept of the critical incident. The Mitchell Model defines a critical incident by reference to what has occurred to the casualty, not by reference to how the firefighters experience the call out. For example, the Mitchell Model suggests a range of incidents which would warrant a psychological debriefing (e.g. single or multiple fatality), yet these very incidents may not have had a psychological impact on fire crews by virtue of how well they performed, their own professionalism, and the realisation that there was nothing they could do to rescue the casualties who were dead by the time they arrived.

It forces the researcher to ask if the concept of the 'critical incident' is therefore a useful one. Is it time for it be replaced with an alternative concept which has as its start point not the incident but the overall psychological health and well-being of fire crews? This point will be further discussed in Section 6.6 of this chapter which looks at the practical implications of this research.

6.4.2 The Significance of Meaning

A further point of convergence between the qualitative and the quantitative studies was the importance of the meaning of each emergency for firefighters. It is evident particularly within the discourse analysis, but reinforced through the q methodology, how casualties and emergencies differ by virtue of the meaning attached to them by fire crews.

Meaning is a significant point which is overlooked in Mitchell's model. Again, only one meaning is attached to the incident and that is its capacity to produce stress and trauma among the fire crew who responded to it. The job of the practitioner conducting a psychological debriefing session is not to explore the meaning of the incident for the fire crew but to explore the reactions, thoughts and feelings of each crew member with a view to normalising/pathologising them through the provision of some psycho-education.

The absence of any exploration of meaning poses the question as to whether it is something which should warrant the attention of the practitioner in any subsequent group intervention. Rather than asking feeling-type questions, should the focus be on exploring the meanings which the firefighters attach to each incident? Again, this issue will be further explored in Section 6.6 - recommendations for practice.

6.4.3 The Firefighter as a Professional

Professionalism was a very strong construct to emerge from both the discourse analysis and the q methodology. What mattered most to the crew was that they did the best they could under the circumstances to effect a successful rescue for the casualties. Not to have done so would have had a greater emotional toll than the tragic circumstances of

any casualty. Their greatest fear, expressed on a number of different occasions by various fire crews was that they didn't do a good enough job and someone suffered or died as a result.

Professionalism as a concept is ignored in the Mitchell Model. The total separation of an operational review from a psychological debriefing is explicitly made clear in the model (Everly & Mitchell, 1995). There is a strong distinction made in the Model between an operational review and a psychological debriefing. While the opening or closing comments to the psychological debriefing can affirm the contribution and role of the fire crew these usually form part of the improvised comments of the debriefing facilitator and not as a dedicated part of the debriefing process.

6.4.4 The CISM Intervention as Potentially Stigmatising

One of the key constructs to emerge from the discourse analysis which, however, was not directly supported through the q methodology, was how the current psychological debriefing intervention was constructed as being potentially stigmatising. Further investigation of the discourse analysis showed how notions of stigma were emergent from extracts which related to how individuals would be professionally perceived by their colleagues – that they would be perceived as being less capable for the work; that there was something wrong with them.

This construct was not directly supported through the q methodology. While a large number of participants shared the view that crew support was of utmost importance to them, no clear evidence emerged that the psychological interventions which currently exist were problematic. Within the discourse analysis the provision of psychological support was constructed as a signifier of caring – that the organisation demonstrated its

concern for the wellbeing of firefighters through the provision of this service, as evidenced by the following extract:

> "But we've had to, down through the years, we had to look after each other. It was only up until recently that you guys came on the scene, but there was all sorts of horrific things happening then. Fifteen or twenty years ago there was no counselling, there was no nothing, people got on with it…..People know that it's there and that's the main thing. People can use it if they need tit. But knowing what is there and what is available and from our perspective knowing that it's not just critical incidents, bit it gambling, drinking, whatever. If you want help on any issue it's there, and that there is a broad spectrum of issues there that it doesn't have to be traumatic incidents." (Participant 58)

6.4.5 Aspects of the CISM Model Which Were Not Reflected in the Qualitative and Quantitative Studies

An important aspect of this research is to identify those key factors which are central to the firefighters' own constructions of themselves and the work they do, with the intention that these constructions would be used to inform the development of a more meaningful psychological support system. It is therefore equally important to identify aspects of the Mitchell Model not reflected in the discourse analysis or the q methodology.

One significant aspect of the firefighters' constructions is that they refused to position themselves as victims. The Mitchell Model would position the firefighters as being secondary victims of trauma, thereby warranting a psychological debriefing. The discourse analysis indicated that being a victim was a subject position that was completely rejected by the firefighters. Equally the q methodology indicated that the

victim was not a significantly shared opinion. This conclusion suggests that while the notion of being a victim of stress may be in keeping with a medical model, it is a subject position both contested and rejected by the participating firefighters.

A further important point of difference between what emerged from the research studies and the key teachings of the Mitchell Model is that participants did not view the emergencies or their own reactions to them in terms of being traumatic. Participants spoke of certain emergencies as being memorable, or in emotional or moral terms as being sad or tragic. Individuals outlined the particular meaning that incidents might have had for them. Crews spoke of the fear they may have felt in a particular situation, or the pressure they felt working against the clock in order to successfully rescue a casualty. The physicality of their work was referred to. Scenes of blood and gore were outlined with limbs and heads being detached, and of having to pick up and bag body parts. A sense of realism was drawn upon. It could be a distasteful and sometimes nauseous part of the job, but it needed to be done and they wanted to do it respectfully in honour of the casualty and their next of kin. However, in recounting all these aspects of their work the construct of trauma or of the work as being traumatic was not drawn upon.

Such a construction is in sharp contrast to that which is imposed by the Mitchell Model, which holds trauma as being its central concept; being both an inherent capacity of the incident (a traumatic incident) and a possible experiential outcome (a traumatic response). The model is effectively introducing and imposing a particular medicalised understanding and set of social practices which is not in keeping with that of the firefighters.

6.5 Theoretical Implications for Occupational Psychology

The learning from this research needs to be considered from two perspectives. Firstly, on a theoretical and conceptual level, what has the research told us about the current model of critical incident stress management which is being used when advising and working with clients? Secondly, the question needs to be asked as to how this research can inform our practice of providing psychological support to firefighters at organisational, individual and crew levels. From a theoretical perspective, this research has succeeded in critically questioning many of the assumptions implicit in critical incident stress management. Providing a critical incident stress management intervention can only make sense when we view firefighters' reactions as being a form of pathology or as potentially leading to pathology, and that firefighters as an occupational group are particularly vulnerable. Both of these assumptions have been successfully challenged by the research. It has demonstrated that firefighters view the incident and their own range of reactions to it in a way that is qualitatively different from how the advocates of CISM view them. Firefighters view the emergency not from its psycho-traumatic potential, but as an opportunity to exercise their professionalism, to execute a successful rescue, and to help people in difficulty. This research would suggest that psychologically, the firefighter positions themselves in a very different place than either the layperson or the psycho-traumatologist would when it comes to dealing with some of the most tragic emergencies that they encounter.

This insight equally prompts a questioning of the traditional environmental 'stimulus-response' models of stress (e.g. Cox, 1993) which still remain so prevalent in occupational psychology, and which form the basis of Mitchell's theory. This research raises two important questions regarding the 'fight or flight' model of stress. Firstly, it

questions how it is, that what is commonly regarded as an environmental threat, is constructed within a network of meanings that emanate from a theoretical perspective rather than from the perspective of the employee themselves. The Mitchell Model presents critical incidents *a priori* and characterises them as being inherently stressful. The Mitchell Model pre-loads both it and the firefighters reactions with a particular set of psychological meanings - that the incident is traumagenic and their subsequent responses are pathologised as a form of stress. This research, however, suggests that firefighters use their own constructs to view emergencies in ways which the Mitchell Model fails to capture. The emergency situation therefore does not always serve as the stimulus for stress, no matter how horrendous or traumatic it may appear to those, including the CISM counselor, subsequently hearing about the emergency.

Given the pre-eminence of the occupational and personal constructs which the firefighters attach to their own capacity to deal with the emergencies they encounter would suggest that a wider theoretical base for supporting their psychological health is called for. Defining stress in relational terms with a series of primary and secondary appraisals (as outlined in page 31, Lazarus, 1993) would offer a way forward which would be consistent with the conclusions emerging from this research. From a health and safety perspective it would advance practice from its current primary focus on the hazard identification to a more meaningful exploration of how firefighters individually and collectively interpret the various hazards they face, and what steps can be taken to minimise the risk of damage occurring.

The conclusions drawn from this research gives equal support to the notion of abandoning the label of stress, and focusing rather on the process of appraisal. There is a great deal of research and interest in emotions in the workplace (Lazarus, 1993;

Folkman, 2011; Dewe, O'Driscoll & Cooper, 2010) proposing a more nuanced way forward to understanding how people experience their working environments. It offers the opportunity to study positive emotions, which heretofore have been largely ignored in the Mitchel model of critical incident stress management (CISM). The study of emotions introduces many of the popular precepts within popular psychology such as happiness at work (Warr & Clapperton, 2010) and resilience (Luthans, Vogelgesang & Lester, 2006). As this research has shown, firefighters readily access the term stress but construct it in terms of their physical response. However, they speak eloquently of their emotional response to the emergencies they respond to. They speak of their emotions as being something to be expected yet question the appropriateness of this in light of the knowledge brought to them by the CISM counsellor.

A further achievement of this research is that it has succeeded in highlighting inherent flaws in the theoretical conceptualisation exposure hypothesis that is central to the CISM model – that without exposure to a critical incident there is no critical incident stress. The notion of exposure to a critical incident has poor specificity – many firefighters are exposed to the same incident but do not experience the same reactions as those which are regarded as being critical incident stress. In addition, the long list of responses that are, post hoc, attributed solely to the incident without exploring any other possible causes, are a significant flaw inherent in the model. Adopting a critical realist perspective as adopted in this research allowed this realisation to emerge. It challenges the notion of causation which is central to the exposure hypothesis, and will inform researchers and practitioners of the theoretical flaws inherent in adopting such a conceptually simplistic model.

However, for as long as the concept of exposure to a traumatic incident remains central to the clinical diagnosis of PTSD, and is accepted as such by the psychiatric community, health and safety practitioners and occupational psychologists, it will be necessary to ensure that the safety audits and risk assessments continue to happen. It remains a value in Irish (and indeed western) society that individual people should not be made solely to carry the consequences of events that have occurred to them, especially where liability can be shown. Gillet (2003) highlights the role that culture, values, and legal and moral science play in the formulation of a diagnosis and which is made real on the bodies and minds of those who are so categorised. While the capacity of occupational psychology to challenge and overcome these factors is limited at best, it can nonetheless actively work with its clients to find ways in which individuals need not identify with or become reliant on the subject position of being a victim to the emergencies they respond to.

6.6 Practical Applications for Occupational Psychology

While a coherent theory can be of immense value in occupational psychology, what is of equal importance is how the theoretical insights gained can be used to inform the day to day practice of those practitioners working with the Fire Services.

Based on this research, the following indicates the direction which the future work of the researcher will take in working with his clients:

- Drawing from the insights gained through both the discourse analysis (e.g. the firefighter as professional, section 4.3.3) and the QMethodology (Factor B, section 5.5.2) it is evident that any wellbeing programme for fire fighters must be based on concepts in which their role as Firefighter is rooted, and not just on problematic concepts such as stress, and Post-Traumatic Stress Disorder. It is

necessary to develop a 'Mental Health and Wellness Programme' for members of the Fire Service which introduces notions such as teamwork, professionalism, community service, and technical ability as important components to supporting their mental health at work. The first draft of such a mental wellness programme which is being developed for a client Fire Service is included in Appendix 12.

- It is evident from the literature review on the Mitchell Model undertaken in Chapter 3 that the concept of "critical incident stress" is problematic by virtue of its construction of the "incident" as being always/already the source of stress. As the discourse analysis suggests Firefighters can experience the "critical incident" in ways other than being a source of stress and trauma. The discourse analysis has shown that it can be a challenge, a means of exercising professionalism, an opportunity to do good. It can make them feel good about themselves once they know that they have done a good job. As psychologists seeking to provide meaningful support to fire services we must therefore be conscious not to over-emphasise our knowledge or stress and illness and ignore or play-down their own constructions of the work that they do,
- This research has highlighted the primary support that fire fighters receive is from their fellow fire fighters. Therefore our model of support must be rooted in concepts of crew wellbeing that the crew can relate with. Under the Mitchell model, crew support has primarily focused on the crew coming together and verbally processing their reactions, thoughts and feelings "about" a particular incident in a structured group process. One of the key insights from this research is that such a process can be problematic for crews both in terms of concern about what other crew members may think about an individual (section 4.3.5, p105). Other research has provided corroborating evidence that fire fighters prefer a choice of supports and that one size of intervention does not fit all

(Kowalski et al. 2011). The reification by our psychological models of crew support as being a cathartic processing of emotional venting must be supplemented by placing an emphasis on the significance of naturalistic forms of crew support. It can be achieved through encouraging crew to talk at an incident; to meet and chat after an incident; to create opportunities to meet and discuss by ensuring that their basic needs for food and drink are met; and inculcating a willingness to reach out for support (individually or collectively) as and when needed and not just after an "incident".

- This research has highlighted how participants' value knowing that support is there should they feel that they need professional support (section 4.3.4 p101). It is important to acknowledge that regardless of the source of the fire fighters stress or distress, that they value the support available to them. On occasions where fire crews experience specific tragedies that fall outside the normal professional experience of firefighters, it is appropriate that a member of the counselling team visits the crew and, rather than conducting a psychological debriefing, to use it as an opportunity to:

  i) acknowledge that the crew had to deal with a significant 'shout' and that it is appropriate to reflect on their experiences of the 'shout'

  ii) encourage the crew to integrate some useful strategies, skills and techniques to safeguard their physical and mental health

  iii) help the Commanding Officer deal with any concerns they may have with regard to the crew or any specific crew member

  iv) create a link for individuals who wish to contact the support service individually

- One of the problems with the Mitchell model is that psychological support is constructed as something that is delivered post an event. While critical incident

stress management contains a wide range of educational supports to fire crews each of these operates from the assumption that they will find a situation stressful. A new approach, based on the insights from this research, would suggest that it is equally valid to assume that as professionals, the fire crews will not become absorbed by the tragedy they encounter but will instead focus on their skills, professionalism and resources which helps them deal effectively with the emergency at hand. Pre-incident psychological interventions can be developed, providing individuals, crews and commanding officers with the insight and skills to manage their emotional readiness for incidents that they are likely to encounter. Such concepts as psychological resilience and strengths based trainings are beginning to be considered by fire services throughout the world. Shakespeare-Finch (2007) has explored how emergency services in Australia are successfully beginning to introduce models of resilience that supports a pro-active approach to self and crew care. Gist et al. (2012) explores how although a resilience centered approach requires a more proactive, consultative and organisationally based methodology than traditional intervention based models of support, they can provide deeper understanding an a multilayered supports to those on the front line.

The researcher is aware that just like critical incident stress management, any intervention will be an attempt at subjectification and therefore must attempt to avoid the pitfalls of being ideologically driven. Instead it should be conscious of the matrix of meanings which operate both within and outside the Fire Service.

While the primary objective of this research in terms of developing an appropriate framework for supporting fire crews has been achieved, researching the acceptance and

value of such supports has not been feasible during the time scale of this thesis. It had initially been thought by the researcher that two forms of support – the CISM model and the newly formed Mental Health and Preparedness Programme – could be comparatively evaluated. However, given the relatively small number of 'shouts' which occur each year and require some form of support, it proved beyond the timescale of this thesis before a sufficient sample size could be gathered.

6.7 Limitations and Future Research

There are a number of limitations inherent in this research which need to be identified and considered so as to aid further research.

The first limitation is that this research was carried out with one single Fire Service, and the participants involved in the study were all retained firefighters. Retained firefighters are only used for an 'on-call' service. Its members are retained to respond to emergency call-outs as required, and are obliged to attend weekly training sessions. The participants regard themselves as being a full-time service, as they are on call 24/7, but for the bulk of their working week they are not based within a Fire Station but are involved in other work and careers. Indeed the participants would regard themselves as being more dedicated to their work in comparison with their colleagues in other Fire Services who, although they may work full- time as firefighters, do so as part of a roster system, which means they are not on call 24/7. As only retained firefighters were used for this research, it would be recommended that a comparable piece of research be conducted with a Fire Service operating a roster of full-time firefighters.

The methodological perspective adopted in this research, particularly the combination of using both discourse analysis and q methodology, could be a criticism made against it. Discourse analysis is often criticised as being too 'soft', that in effect it tells us nothing about the true nature of psychological phenomena (Willig, 2008; Tuffin, 2005). Researchers with a quantitative leaning would regard discourse analysis as being too provisional, that participants might say one thing on one occasion but express something different on another; that the transcripts are always open to interpretation; and, left in the hands of an amateur discourse analyst, could really give us very little useful information. Equally, when it comes to q methodology, some would argue that as a quantitative method it is at best on the border between being qualitative and quantitative. Some academics such as Shinebourne (2009) and Creswell (2009) regard q methodology as not being sufficiently qualitative, as it involves neither a questionnaire nor an experimental design. They instead categorise it as being a quantitative research method. However, in terms of addressing this research question, q methodology was the most appropriate one to use as it is the only statistical process allowing for what is common in each individual's subjective understandings, beliefs and experiences to be assessed.

Criticism could also be made of the fact that this research made no attempt to quantify or assess the occurrence of PTSD or PTSD-like symptoms among participating firefighters. No data has been published in Ireland to date with regard to the extent to which stress or traumatic type symptoms are evident within the Fire Services. International studies vary significantly suggesting that the figure among firefighters and other emergency responders of PTSD type symptoms ranges from 1.2% in Spain (Miguel-Tobal et al., 2006), to 21% in the UK (Clohessy and Ehlers, 1999). A study by Misra, Greenberg, Hutchinson, Brain and Glozier (2009), looking at the psychological

impact of the 2005 bombings on the London Ambulance Service, found that 4% of those directly involved in dealing with the bombings reported probable PTSD, while a further 13% indicated that they were experiencing substantial distress. Assessing the extent of PTSD type responses would need a very different piece of positivist and realist research, and held no place in this researcher's mind when exploring the discursive formations utilised by participants when discussing their own responses.

A further criticism which could be made of this research is the fact that in adopting a critical realist approach it places too great an emphasis on the critical exploration of the Mitchell Model, and does so without making any valid comparisons with other similar models of psychological support (e.g.Dyregov, 1989). However, the research focused on the Mitchell Model for a very clear reason. It is the one most widely used by the emergency services in Ireland. It is the model promoted by the networks of emergency response and support services, even to the extent of forming themselves into a national body advocating the use of the Mitchell Model with the endorsement of the Psychology Department within one of Ireland's universities (National University of Ireland, Maynooth). CISM has rapidly become the 'standard of care' and failure to provide CISM would render an organisation negligent in its 'duty of care' towards its employees. By being critical, this research sought not just to compare which is the most effective model of support, but also to highlight how the very notion of CISM can only make sense in a world where the reactions of firefighters are singled out as being a pathology.

A further criticism which could be made against this research is that it has failed to produce an alternative psychological intervention to the Mitchell Model. This research has not made any attempt to produce a therapeutic model of intervention. While the

notion of what is therapeutic can be broadly defined, producing a set of interventions, and doing a comparative study with the Mitchell Model was not the objective of the research. What this thesis aims to achieve is to introduce a model of support for firefighters which is rooted in their own experiences of themselves and the work they do. It sets out a framework whereby a Fire Service can build in the notion of psychological health and well-being as an integral part of how firefighters work, in addition to accommodating alternative interpretations of the incident rather than solely focusing on its psycho-traumatic potential. Such an approach is a prime example of a primary stress prevention strategy (Cooper & Cartwright, 1997), aimed at protecting the psychological well-being of firefighters through the development of better ways of working.

A final criticism which could be made of the research is the positioning of the researcher in conducting the actual interviews with the participating fire crews. While the researcher would not have been personally known to many of the firefighters, they would have been fully aware of the fact that he was from the company which provided them with their crisis management support service. While the researcher was continually impressed with participants' openness and willingness to engage with the interview process, he did consider whether his position as an 'expert' in some way influenced the way in which they spoke about their experiences. Were they attempting to hide their true experiences? Were they conscious that if they said the wrong thing they might be drawing attention to themselves in a potentially negative way? Did they tell the researcher what they thought he wanted to hear? Finally, the researcher questioned whether, if he were to come back another evening and ask the same questions again, would their discussion follow the same trajectory or take a completely different path. While the researcher took every precaution that he could to ensure that

there was an open, frank, honest discussion with participants, these questions still remain as potential limits to the value of this study.

In terms of further research, there are a number of different aspects that have arisen as a direct result of this research and which could lead to further consideration. It would be interesting to conduct a similar exercise with firefighters who work in a non-retained Fire Service. Undoubtedly their experience of being a firefighters would be very different as it would tend to be a career with a totally different set of conditions, living and working as part of a 'watch' system. They spend much more time together as a crew, sharing meals and crew accommodation, and in many regards considering themselves to be a more professional service than the retained firefighters. From a research perspective it would be interesting to analyse how they construct their experiences of dealing with incidents, to identify what factors emerge for this group, and to see how they compare with those discursive constructions drawn upon by the retained firefighters.

A further research area worthy of consideration would be the design of a 'wellness programme' which focuses on helping firefighters to explore the meaning which emergencies have for them, rather than designing an intervention which is better than the Mitchell model. Ultimately, dealing with human carnage and tragedy is always going to be the essential part of a firefighter's job. They will always have to directly engage in situations where they encounter people at the most profound junctures, and experience the vulnerability of human life. Rather than positioning firefighters as potential victims to an illness in these situations, given the emphasis on meaning that has emerged through this study, it would be valuable to conduct research on issues such as the influence of personality factors and on how people draw meaning from, and make

sense of, these situations. Currently there is no research which has explored the relationship between how an individual's characteristics (such as personality type or an individual's prior experience of dealing with a personal trauma) might be an indicator or predictor of how they are likely to deal with emergency situations in the Fire Service.

6.8 Overall Summary

In the final analysis there remains both a legal obligation and a moral imperative that Fire Services in Ireland ensure firefighters are adequately prepared and equipped to deal with the psychological, as well as the physical, demands of the work they do. While the overall focus of this obligation to date has been on providing an appropriate psychological intervention to help prevent any illness or damage occurring, the achievement of this research has been to show that such an approach, while it may make intuitive sense, is largely misguided.

In the absence of any convincing evidence as to the efficacy of early post-incident intervention (such as critical incident stress debriefing) as being an effective method of preventing future psychopathology, this research seeks to offer Fire Services a way forward to meet both their legal and ethical obligations. It offers an approach to understanding the psychological dimensions of a firefighter's work which counterbalances the perspective that critical incidents are always/already inherently traumatic. Instead it proposes that, by building the concept of support into every aspect of their performance, the psychological well-being of the crews will be protected even in the most challenging circumstances.

CHAPTER 7

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CHAPTER 8

APPENDICES

APPENDIX 1

REFLECTIVE PIECE

This section of the thesis contains a personal reflection on how I have changed, both personally and professionally, through the process of undertaking this research. In addition it contains some reflections on the possible significance or impact which this research could have on occupational psychology in Ireland.

Personal Impact

It can be difficult to reflect back on the person that I was when I first decided to enrol for this research. In many regards I am the same person. I have the same likes and interests as I had back then. I have the same physical characteristics (although with a bit more fat and a few more grey hairs). Broadly speaking I live by the same priorities and values that inform how I live my life. Yet the process of engaging with this research has had a profound influence on me, altering my attitudes to life and causing changes in my life which may or may not necessarily be perceptible to others, but which have informed how I am as a person now.

When I think about the impact which this research process has personally had on me, I first and foremost think about the people I have worked with during this research, and what I believe I have learned from them. Dr. Christine Doyle was my initial Course Director who, shortly after accepting me onto the course, was diagnosed with terminal cancer. Christine returned to live in Ireland during her illness in order to receive her chemotherapy, and throughout her visits to hospital in Cork would invite me to come to

her for supervision. While many could (and with a degree of righteousness) criticise both Christine and I for engaging in these supervisions, I would selfishly argue that these were some of the most important and valuable supervisions I received from the programme. While there were no 'Tuesdays With Morrie' type discussions, her focus on being present as a teacher was deep-rooted. Through her example Dr. Doyle taught me that to love what you do is one of the most profound gifts anyone can have in life. She continually affirmed that in spite of psychology's best efforts to 'suck the joy' (my phrase, not hers) out of the workplace through many of its rigid models and practices, we as practitioners owe it to clients and the people we serve to do good work for them. I have tried to reflect that ethos in my work since.

The intellectual challenge that I needed and had sought from the research programme was afforded to me through working with Dr. Pippa Dell. Having been away from studying for almost twenty years it was a significant challenge to me to just master the basics of reading and thinking critically. My education up till this point had consisted of reading and repeating, whereas now with Dr. Dell I was learning to think and integrate and coherently express ideas that were powerful and new to me. Introducing me to a wide range of social constructionist writings was a very disconcerting experience for a (positivist) occupational psychologist. But it was what I needed. Having these conversations gave me the confidence, frameworks and language to question and examine the aspects of my professional and personal life that I had heretofore taken for granted.

The reading, and then the absorbing of all the ideas they contain, has proved to be an equally valuable part of this research. I have been introduced to researchers, authors and ideas which I had never been exposed to previously and they have had a significant

impact on how I now life my life. In particular I would like to mention two ideas which have had a profound personal impact. The first idea is the notion that language plays a constitutive function; that it does more than reflect the nature of things. Since being exposed to and absorbing that insight I have developed the practice of becoming increasingly attuned to language. It is more than listening and reading; rather it is a seeking to understand how language (and indeed the wider notion of discourse) can constitute that which it speaks of. I challenge myself to attend to the language I use, what functions I expect it to perform, and how in language the 'I' that I keep coming back to is in fact a changing constant.

There was no doubt but that I struggled with the discipline required to undertake research of this magnitude. It was an enormous personal undertaking which cost me financially, personally and healthwise. The level of dedication which this research required is something which does not come naturally to me, and highlighted my own personal shortcomings including my lack of discipline, my poor organisational skills, my slow reading and comprehension skills, and my own struggle with being able to write at a sufficient depth warranted by a professional thesis. Each of these are obstacles which I continue to struggle with. But it is only when I look back at the first tentative paragraphs, drafts, etc. that I realise how much my skills have improved and how my personal characteristics have had to be held in check so as to ensure that the thesis actually got to this stage. Working with Dr. Carla Gibbes at the critical final stage of pulling all the research together taught me how to become more structured and disciplined in my approach to work. Without her insights this thesis would not have been completed.

Professional Impact

In this section I would like to explore how I believe that conducting this research has impacted on my practice as an occupational psychologist.

It is appropriate to begin by looking at the factors which prompted me to undertake this research in the first place. For about 10 years I have been working on a consultancy basis with the Fire Services in Ireland either establishing work place counselling programmes (Employee Assistance Programmes) or Crisis Management Support Services. The impetus behind the establishment of these programmes had been a change in the law in Ireland which placed a legal obligation on employers to ensure that the psychological wellbeing of individual employees was not damaged through the course of their work. This coincided with the September 11th attacks in the United States, along with the greater significance being attached at a social partnership level to issues such as bullying, harassment, and stress in the work place. Employers, including the various Fire Services around the country, were under pressure to act, which led to the introduction of CISM services as a recommended standard of care.

I trained at both a basic and an advanced level in CISM practice, and helped implement the model among client companies. I worked with psychologists and counsellors providing interventions to fire crews in the aftermath of emergencies. While participants were very eager, were polite, and generally appreciated the interest shown in them, it was obvious that their interpretation of the emergency and their response to it was vastly different to what I was outlining and telling them that it should or could be. I realised that they were beginning to question whether their own responses were 'normal' or not. Was the fact that they hadn't felt something in a particular way a sign that there was something really wrong with them? I began to ask myself what it was I was *doing* to the fire crews through the sessions that we had been conducting. Was psychology actually making the situation worse? By undermining the fire crews' normal

mechanisms of support, applying a psychological framework that had no particular salience with them, encouraging them to look at themselves and their colleagues for all the signs/symptoms of an illness, (which at the end of the day is ill-defined even by medicine's own precepts) was I, as a psychologist, actually engaged in a process of pathologising the work place?

The course provided me with two specific skills. The first is the ability to understand and critically evaluate research. The research around CISM is highly oppositional and conflicted. The focus of the research is primarily to prove the effectiveness or otherwise of a particular model of psychological intervention. By undertaking both a qualitative and a quantitative study, I learned the value of each epistemological and methodological perspective.

More profoundly (for me) conducting both the qualitative and quantitative research allowed me to explore the issue of ontology. Much of the previous research speaks as if the firefighters' reactions exist as an independent, universal entity with a clearly defined ontology. By giving it a name, it makes it appear as real and much of science's efforts are condensed into making it real. Without adopting a critical realist perspective I too would have progressed down the same path. However, the qualitative approach opened up alternative understandings of the same phenomena. It allowed another reality to emerge, that of the participating firefighters.

It was my questioning of these issues which led me to undertake this research and to adopt a critical realist perspective. Since undertaking the research I have dropped the practice of CISM totally from our firm. Having discussed these issues with our clients, psychologists and counsellors I have now positioned the service which we provide as

being one of 'workplace support', where our objective is to help individuals access their own, group, organisational, and social supports to help them through an unexpected situation. Working with fire crews, our counsellors facilitate a group discussion, whereby participants are free to discuss their experiences and meanings around the emergency, how it fits with their own world-view, and what points they could learn to help them deal with any similar situations in the future. The focus of such discussions is away from pathology and more towards health, wellness and professionalism.

Finally, I believe that undertaking this research has made me more critical as a psychologist. I have become better attuned to the political nature of psychology. While I have been in touch with the issue of power at an organisational level, I have, personally, been largely blind to the intrinsic power of occupational psychology as a discipline. The inherent scientism paints a strong veneer of objectivity and impartiality, and is heavily oriented to the work of the occupational psychologist. However, since doing this research (and I imagine like every newly-minted critical psychologist) I have become acutely aware of how our ethos, methods and tools not only serve an overarching capitalist agenda, but promote values of individualism, which on the surface appear as inherently natural and good. Needless to say such a perspective is not making me popular with my colleagues. I am now pushing them to question and explore the concepts they use. I am more discerning with regard to how we position ourselves as a firm, and each intervention which we provide to our clients. I am less willing to dive into projects (and recently turned down a significant commercial assignment) if I believe that the work is not in keeping with the redefined values which I hold as a psychologist – to help people live meaningful, productive work lives.

The Wider Impact Research Has for Occupational Psychology

Having conducted this research I am conscious of how the research findings for this thesis at the University of East London need to move out into the wider arena of the psychologists and counsellors who work with fire services throughout Ireland and indeed the rest of the world. Throughout the research, I have become increasingly conscious of the social dimension of any science. It is only through a series of social transformations that what is discovered in the laboratory becomes a 'fact' accepted by the wider, in this case psychologists', community.

Let me begin by looking at the flaws that are inherent in my research. To begin with, it uses both a perspective and a methodology that are not readily accepted by the scientific community within occupational psychology. Qualitative studies, and a (mildly) social constructionist perspective tend not considered a hard enough science. By and large, occupational psychology, both in terms of research articles and text books, places a greater value on positivist research. It is in keeping with the ethos of managerialism – defining and controlling uncertainty. A qualitative study is not in keeping with the ethos.

Secondly, the study will be firmly placed into the 'opponents' quarter in the CISM wars and, as such, will not be well received by the CISM community in Ireland. I expect this will come to the fore when I will be a guest speaker at the Chief Fire Officers Conference in Ireland. I suspect the probable criticisms will primarily be of the *ad hominem* variety including (1) personal bitterness at not winning particular CISM contracts with other Fire Services; (2) if it had been any good the research would have been done at an Irish university.

What are the hopes that I have for this research? While the social aspect of research is a reality, it does not devalue the impact that this research has for practitioners. To begin with, I would hope that the research would broaden the focus of practitioners to question how fire services can enhance the wellness and performance of their crews through better resources, effective training and competent command. Focusing on pathology may be rewarding for counsellors and psychologists, but finding strategies that protect, sustain and provide a safe working environment for firefighters is a far more significant (and rewarding for the firefighters) way forward.

Secondly, I would hope that this research will prompt other psychologists to undertake discursive oriented research. While the 'turn to language' has influenced areas such as clinical and counselling psychology, the occupational field has largely failed to adopt such a perspective. This is understandable but disappointing. This research has shown that a discursive approach can yield meaningful results which will help inform our practice as occupational psychologists.

A further lesson that I hope occupational psychology can learn from this research is to develop a more critical perspective, or stance, in its research and writings. While critical management studies are rapidly becoming a well-established area of study within schools of management, occupational psychology has been remarkably slow to promote a critical perspective. While there may be many economic and professional factors to account for this, I would hope that the critical perspective adopted in this research would show that it is possible to question and challenge many of the assumptions implicit in our area of professionalism. A profound message which I have learned from reading Gillespie's book 'Manufacturing Knowledge' (1993) is that social science can quickly assume the priorities and needs of its paymaster.

It places psychology in a poor light, that an Irish university and psychology department are willing to give their imprimatur to a private US company which has a vested interested in sustaining the need for trauma services in society. By virtue of the critical nature of the work they do, firefighters are deserving of the best possible care and attention. It does not serve them well that we as psychologists are unwilling to disengage from procedures that have been shown to be less effective. So finally, I sincerely hope that this research will enable/encourage people concerned about the psychological well-being of firefighters to challenge other people's orthodoxy, to question themselves and their current methods of working, and to be prepared to change and move forward. If this research achieves all of that it will have been worth the effort.

APPENDIX 2

RESEARCH INTO
CRITICAL INCIDENT STRESS

My name is Joe O'Mahoney and I am writing to invite you to participate in some research which I am planning to conduct on how Fire Fighters deal with the critical incidents which they encounter in the course of their work.

For the past number of years my colleagues in AHR Services and I have been providing the Critical Incident Stress Support programme to the members of Cork County Fire Service. This programme is designed to provide appropriate help and support in dealing with the potential impact which critical or traumatic incidents can have on individuals and their crew. We are always eager to ensure that the support we provide is beneficial and achieves its objective of looking after each member of the fire service should they ever feel that they need it.

This research is part of that ongoing development of the CISM programme. As an Occupational Psychologist I have decided to conduct some further research on Fire Fighter's experiences of critical incidents, as is outlined in the enclosed brochure. This research is being conducted under the guidance of Dr. Pippa Dell, Chartered Psychologist and with the approval of the University of East London. The professional and ethical guidelines of both the Psychological Society of Ireland and the British Psychological Society are also being applied to this research.

Most importantly however, is the fact that this research can only be conducted with the support of members of Cork County Fire Service. Permission has been granted by the Chief Fire Officer, Mr. Ger Malone, to approach a sample of the fire crews within Cork County Fire Service to participate in the research. Your crew has been one of those selected to participate in the study.

You are welcome but in no way obliged to participate. I would however sincerely hope that you would consider my request as I am very eager to hear about your past experiences of traumatic incidents and how you dealt with these in the days and weeks afterwards. The research in no way undermined our current programme, and if anything, will help us ensure that become more effective.

The research basically consists of a group discussion where you will be asked your opinion on your experiences of dealing with emergency situations, and the impact they may have on you. These discussions will be recorded and I will transcribe the tapes of the recorded sessions. I will present these transcripts for your final input and review. Your contributions will be anonymous when they are transcribed and the tape of the discussion will be deleted. If, at any stage, you have any questions please you are welcome to contact me at (021) 4317782.

Thank you for taking the time to consider my request and I hope to have the opportunity of meeting with you at our discussion.

Yours sincerely

_____

Joe O'Mahoney
AHR Services Ltd.

APPENDIX 3

PARTICIPANT'S CONSENT FORM

I, _____, hereby give my consent to be a participant in the research being conducted by Mr. Joe O'Mahoney into Fire Fighter's experiences of critical incidents at work.

In addition, I wish to acknowledge that:

1. My contribution will be treated with total confidentiality by the researcher
2. I have the right to withdraw from this research at any time, without prejudice
3. I can refuse the transcription and publication of the consequent data arising from my participation
4. I can inform the researcher at any time if I become concerned about or upset by my involvement in the research.
5. I have read the material provided by the researcher and fully understand the purpose of the research as set out in the therein.

Please, print, sign and date both copies, retaining one copy for your own files and return the other to the researcher.

Print Name: _____

Sign Name: _____

Date: _____

Date of Birth: _____

No. of Years Service: _____

APPENDIX 4

UNIVERSITY OF EAST LONDON

APPLICATION FOR THE APPROVAL OF AN EMPIRICAL PROGRAMME INVOLVING HUMAN PARTICIPANTS

Please read the Notes for Guidance before completing this form. If necessary, please continue your answers on a separate sheet of paper: indicate clearly which question the continuation sheet relates to and ensure that it is securely fastened to the report form.

1.	**Title of the programme:** D. Occ. Psych. **Title of research project (if different from above):** The Deconstruction Of Fire Fighters' Responses to Critical Incidents
2.	**Name of person responsible for the programme (Principal Investigator):** Dr. Pippa Dell **Status:** Principal Lecturer **Name of supervisor (if different from above)** **Status:**
3.	**School:** Psychology **Department/Unit:**
4.	**Level of the programme (delete as Appropriate):** Postgraduate (research)
5.	**Number of:** **(a) experimenters (approximately):** One (1) **(b) participants (approximately):** Forty (40)
6.	**Name of researcher (s) (including title):** Mr. Joseph O'Mahoney **Nature of researcher (delete as appropriate):** Student **If "others" please give full details:**
7.	**Nature of participants (general characteristics, e.g University students, primary school children, etc):** Full and part-time Fire-Fighters up to and including Assistant Chief Fire Officer rank in Ireland.

8. Probable duration of the programme:

from (starting date): August 2006 **to (finishing date):** October 2006

9. Aims of the programme including any hypothesis to be tested:

In the course of their work Fire Fighters are require to respond to situations involving individuals in distress. Typically such incidents require Fire Fighters to rescue victims from threatening situations (such as a fire or road traffic accident), or retrieve human remains in the aftermath of an incident (suicide or accidental fatality), or to deal with the relatives of victims at a time when people are most distressed and vulnerable. In addition, the role of the Fire Fighter is becoming increasingly difficult as they are now required to provide emergency first aid, deal with increasingly complex incidents (multiple fatalities), and perform effectively under increasing work pressures, oftentimes in the public eye.

The issue of how Fire Fighters deal with the psychological impact of these situations is constructed primarily from a trauma perspective as set out in the psychiatric and psychological literature (McNally, Bryant and Ehlers, 2003). Using the nomenclature and classifications systems of the two world's leading classification systems for mental illness, namely the American Psychiatrist's Association Diagnostic and Statistical Manual IV (DSM IV) and the World Health Organisation's International Classification of Diseases (ICD-10), Fire Fighters are seen as a particular occupational group which are "high risk" of Post Traumatic Stress (PTS) and Post Traumatic Stress Disorder(PTSD). The DSM IV views Post Traumatic Stress as the normal stress response experienced by individuals in the aftermath of a trauma, and is thought to last between 2 – 5 days. Post Traumatic Stress Disorder, on the other hand, is regarded by both the DSM IV and the ICD-10 as an abnormal stress response. It is diagnosed as occurring in individuals whose stress symptoms have not lessened with 4-6 weeks after a traumatic incident.

While psychological suffering in response to traumatic incidents has always been with us, it wasn't until 1980 that the term PTSD was introduced into the psychiatric literature (Joseph, Williams and Yule 1997). Mezey and Robbins (2001) questions the usefulness and validity of PTSD as a psychiatric category, as the criteria for diagnosis has been constructed out of socio-political ideas rather than psychiatric ones. As the diagnosis of PTSD in intrinsically tied up with there being a specific etiologic *event* the question arises as to what constitutes a traumatic event.

The DSM IV broadened the definition of traumatic stressor and emphasised the subjective perception of threat (McNally, Bryant and Ehlers, 2003). Applying such a classification to the experiences of Fire Fighters raises a number of important points for how Fire Fighters view themselves in relation to this key aspect of their role – first, the emphasis on the subjective definition of what constitutes a traumatic event as contained in the DSM IV creates problems for firefighters and their managers as every incident they respond to can be, by its very definition, potentially traumatic. Second, it places Fire Fighters in the role of a being a secondary victim to the trauma when most firefighters tend to see themselves as being there to make the situation better for the individuals who need them. Third, there is a danger of pathologising what many firefighters view as being a normal part of their job. While traditionally this may have been exemplified as the Fire Fighter being the cool hero, showing no emotion, the current reality for Fire Fighters appears to lie somewhere in the middle – being neither unmoved nor reduced to emotional or psychological wrecks in the face of human tragedy.

Unpicking the assumptions that PTSD is a necessary condition for Fire Fighters has very significant implications for the management of Health and Safety issues for fire crews. Current Health and Safety Legislation in Ireland (1992) places a responsibility on employers to ensure that the work-place does not cause any psychological injury to individuals in the course of their work; that risks are assessed for and appropriate interventions applied to prevent the likelihood of the injury occurring. Such legislation has led to a number of litigation cases being taken by firefighters against their employer with regards to their failure of their duty of care in providing appropriate support and interventions in dealing with the work-place trauma. Fire service management are eager to ensure that they provide the most appropriate standard of care to their crews.

The aim of this research is to see how Fire Fighters make sense of their experiences of critical incidents. It seeks to explore how these understandings are discursively constructed and what social practices these constructions warrants. In particular, it seeks to understand if their exposure to traumatic incident is necessary and sufficient for them to develop PTSD, of if other personal and organisational factors come into play. In addition the research will explore the individual and collective strategies used by Fire Fighters in dealing with trauma, placing these responses in the context of the Mitchell Model of Critical Incident Stress Management (Everley, 1995) which is currently the dominant model for dealing with trauma among the emergency services.

American Psychiatric Association (1980) Diagnostic and Statistical Manual of Mental Disorders (3rd ed.) Washington DC: Author

American Psychiatric Association (1987) Diagnostic and Statistical Manual of Mental Disorders (3rd ed. rev.) Washington DC: Author

Everley G.S. (1995) Innovations In Disaster and Trauma Psychology Vol. 1 – Applications In Emergency Service And Disaster Response, Chevron Publishing, Maryland.

Safety, Health and Welfare At Work Acts (1998), *Government Publications*, Dublin.

Joseph S., Williams R., Yule W. , (1997) Understanding Post-Traumatic Stress – A psychosocial perspective on PTSD and Treatment, John Wiley & Sons, London.

McNally R.J, Bryant R.A., Ehlers A., (2003) Does Early Psychological Intervention Promote Recovery From Posttraumatic Stress? *Psychological Science In The Public Interest,* Vol 4, No. 2, pp45 – 79

Mezey G., Robbins I., (2001) Unsefulness And Validity of Post-Traumatic Stress Disorder As A Psychiatric Category *British Medical Journal*, Vol 323, pp 561 – 563

World Health Organisation (1978). *Mental Disorders: Glossary and Guide To Their Classification In Accordance With The Ninth Revision of the International Classification of Diseases*. Geneva: WHO

World Health Organisation (1993). *Mental Disorders: Glossary and Guide To Their Classification In Accordance With The Tenth Revision of the International Classification of Diseases*. Geneva: WHO

10. Description of the procedures to be used (give sufficient detail for the Committee to be clear about what is involved in the programme).

Please append to the application form copies of any instructional leaflets, letters, questionnaires, forms or other documents which will be issued to the participants:

This research will primarily be based on an analysis of responses participants will give to a pre-determined concourse of statements which have been developed in accordance with the various discursive practices permeating the notion of critical incident stress among Fire Fighters.

The research will be conducted by a Registered Occupational Psychologist with the Psychological Society of Ireland. For the past 11 years I have worked with a number of the Fire Services in Ireland, providing Critical Incident Stress Management Programmes to various fire crews. I am a Certified Trauma Debriefer, having completed both Basic and Advanced Training with the International Critical Incident Stress Foundation. These qualifications are recognised by the World Health Organisation as being an acceptable standard of care in the aftermath of a Critical Incident.

To date I have secured permission from a number of Chief Fire Officers who are eager to provide me with access to their fire crews in order to conduct the research. Participants will be

invited to engage in the research by means of a letter which will be circulated to each member of the various participating fire crews. Their participation will be totally voluntary and will be conducted during one of their normal training evenings.

The primary data will be collected through asking both individual Fire Fighters and fire crews to rate their responses to various statements pertaining to critical incident stress in the fire service. This will be a "paper and pencil" exercise, taking up to 60 minutes. Each response sheet will be collected and analysed using QSort methodology.

Each aspect of the research will be conducted in accordance with the Research Guidelines of the British Psychological Society (BPS). Such guidelines carry particular protocols regarding the ethical and operational standards which a researcher will be required to uphold. They state specific protocols regarding the use of consent forms, confidentiality, and anonymity.

Full debriefing will be provided to participants once the analysis of the response sheets has been completed. Such debriefing will involve the Researcher revising each participant and crew to present the overall research findings.

11. Are there potential hazards to the participant(s) in these procedures? YES

If yes: (a) what is the nature of the hazard(s)? Reading statement on the issue of Critical Incident Stress may cause an individual Fire Fighter to remember particular incidents and in turn experience some distress.

(b) what precautions will be taken? Such emotional episodes tend to be of short duration. All questionnaire sessions will be conducted by an experienced Critical Incident Stress Counsellor. Should individual(s) become upset during the session, the focus group will be immediately suspended. The researcher will then ask what the group wishes to do – whether they wish to recommence after an agreed interval, reschedule for a later time, or cease with the intervention entirely. If, after taking part in a session, individual(s) continue to feel uncomfortable, one-to-one or group interventions can be provided as required. The researcher is an experienced group facilitator and critical incident stress counsellor and has access to a network of registered, professional counsellors whom he can call on to provide ingoing counselling support if required.

12. Is medical care or after care necessary? NO

If yes, what provision has been made for this?

13. May these procedures cause discomfort or distress? YES

If yes, give details including likely duration: See 11 above.

14. (a) Will there be administration of drugs (including alcohol)? NO

If yes, give details:

(b) Where the procedures involve potential hazards and/or discomfort or distress, please state what previous experience you have had in conducting this type of research: The researcher is a Registered Occupational Psychologist with the Psychological Society of Ireland, and is an experienced Critical Incident Stress Counsellor having successfully completed Basic, Advanced and Individual Training in the area. This training is accredited by the International Critical Incident Stress Foundation (ICISF) and is regarded as a standard of care by the World Health Organisation (WHO). It qualifies for ongoing Professional Development Hours (PDF) by the Psychological Society of Ireland. My prior experience of conducting this type of research consists mainly of conducting discussion groups and administering questionnaires as part of a quality review which my organisation conducted with the Fire Service and Trinity College Dublin (TCD) last year.

15. (a) How will the participants' consent be obtained? Participants will be invited to participate in the research by means of a letter which will be issued to Station Officers within the Fire Service and which will be posted on the notice boards within each Fire Station.

(b) What will the participants be told as to the nature of the research? Participants will be given a full account as to the objective of the research (to identify how they construct their experiences of trauma), how the sessions will be conducted and recorded, what will be done with the content of the material gathered after the sessions, and what will be the potential outcome of the research. All participants will be dealt with in an absolutely honest manner, and in accordance with the British Psychological Society's (BPS) research guidelines. Participants will be fully debriefed at the end of the research. See 10 above.

16. (a) Will the participants be paid? *YES*

(b) If yes, please give the amount: **£**

(c) If yes, please give full details of the reason for the payment and how the amount given in 16 (a) above has been calculated (i.e. what expenses and time lost is it intended to cover): Sessions will be conducted during the participants normal working period, and as such will be paid by their employers.

17. Are the services of the University Health Service likely to be required during or after the programme? *NO*

If yes, give details:

18. (a) Where will the research take place? The research will be conducted in the Fire Station of each fire crew in the Republic of Ireland.

(b) What equipment (if any) will be used? Paper and pencil questionnaire.

(c) If equipment is being used is there any risk of accident or injury? If so, what precautions are being taken to ensure that should any untoward event happen adequate aid can be given: Not applicable.

19. Are personal data to be obtained from any of the participants? YES

If yes, (a) give details: The age, gender and length of service will be requested of participants. In addition they will be asked about their previous experience of dealing with work-place and personal trauma, and details of recent incidents which they have responded to. Participants will be asked if they have participated in a debriefing session which forms part of the current intervention for dealing with critical incident stress.

(b) state what steps will be taken to protect the confidentiality of the data? This material will be kept on file in a locked, fire-proof cabinet in the experimenter's filing room at his offices.

(c) state what will happen to the data once the research has been completed and the results written-up. If the data is to be destroyed how will this be done? How will you ensure that the data will be disposed of in such a way that there is no risk of its confidentiality being compromised? Response sheets will be kept until six months after the viva examination has been conducted. They will then be shredded.

20. Will any part of the research take place in premises outside the University or will any members of the research team be external to the University? YES

If yes, please give full details of the extent to which the participating institution will indemnify the experimenters against the consequences of any untoward event: The Fire Stations where the research will be conducted will be covered by Public and Employer's liability insurance.

21. **Are there any other matters or details which you consider relevant to the consideration of this proposal? If so, please elaborate below:** No

22. **If your programme involves contact with children or vulnerable adults, either direct or indirect (including observational), please confirm that you have the relevant clearance from the Criminal Records Bureau prior to the commencement of the study.** Not applicable.

YES/NO

23. **DECLARATION**

I undertake to abide by accepted ethical principles and appropriate code(s) of practice in carrying out this programme.

Personal data will be treated in the strictest confidence and not passed on to others without the written consent of the subject.

The nature of the investigation and any possible risks will be fully explained to intending participants, and they will be informed that:

(a) **they are in no way obliged to volunteer if there is any personal reason (which they are under no obligation to divulge) why they should not participate in the programme; and**

(b) **they may withdraw from the programme at any time, without disadvantage to themselves and without being obliged to give any reason.**

NAME OF APPLICANT: **Signed:**

_____

(Person responsible)

Mr. Joseph O'Mahoney

_____ **Date:**

_____

NAME OF HEAD OF SCHOOL: **Signed:** _____

_____ **Date:**

_____

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[January 2000]

APPENDIX 5

Transcription Notation.

Underline	Speaker emphases the underlined words or portion of word/sentence.
?	Questioning intonation
:	Elongation of a word (usually a vowel)
Carr-	Word cut off
(.)	Pause in speaking
.	Micropause in speaking
[ ]	Speakers overlap
( )	Individual laughs
{ }	Group laughs
**	Audible sigh
@	Throat clearing

APPENDIX 6

DISCOURSE ANALYSIS ROUGHWORK

RQ1

Transcript 1 P 8–11

reference to the challenges they face in actually getting to the incident ("doing through the village on a Sunday afternoon, driving fast, who'll take the children, twenty four hours on call"). It is the sudden intrusion of the incident into their daily lives which initially marks the event as stressful. The language used presents the stress as something which has different qualities. Stress is constructed as having certain qualities ("good, different types, stress in the beginning, different stress yet again") and is constructed in a manner which suggests that the stress helps them to perform more effectively ("parking more effectively, having clothing ready, heart starts going faster, you're wondering what it is, if it's nothing much it helps you relax straight away you know, it's just a job then").

Construction 2- The Incident As A Puzzle

F: Are there some incidents worse than others would you say?

CASUALTY what sort of casualty?

P22 I would

P20 At the moment I would say that the worst ones are the RTA's (road traffic accidents). That's when you're most likely to meet casualties.

type

casualty

P25 Because sometimes the information that we get can be slightly a bit down the line, if you know what I mean. They might say RTA. Then when you get there it's actually somebody trapped in the car. Sometimes the information that's coming in from the public side going to whoever's took the call that that information didn't come out. You don't realise until you get there that it's actually a lot bigger than it actually is.

as something bigger

F: But once you know that's it's an RTA, what it's like in the rig going out to the incident?

as involving them personally

P22 The first thing you think of is who do I know that's on the road. Is it my brother…because we deal in the local area.

P25 The probability is that somebody is going to know somebody if they're local.

emotion

P20 And the mood is serious too. With a chimney fire there we would be chatting away in the back and the driver gets there you know what I mean and then you get out - we all know what happens next. But when it's an RTA or something like that it's quite serious in the cab I find there anyway, and

8

you start to try and imagine the scene. O'L's cross, we know the land mark, we start visualising, trying to. And it does help as well. You don't over visualise. But you just imagine two cars, so you start thinking then what do I need. Like we got a hospital bag there, like an ambulance bag and there's a few first responders in the group, you start thinking who's best as what and who's going to take the lead and who's great at putting on collars, things like that you know.

F: And when you arrive at the incident?

P20 You get on and do it.

P25 When you arrive at the incident it's actually a different thing, because you kind of go into a work mode. So you actually haven't got time to work out is there anything stressful happening. Or what's in front of you. You go away and do it. Ok afterwards fair enough, but at the time, you just can't look. That's it – this has to be done, and that's the way it is.

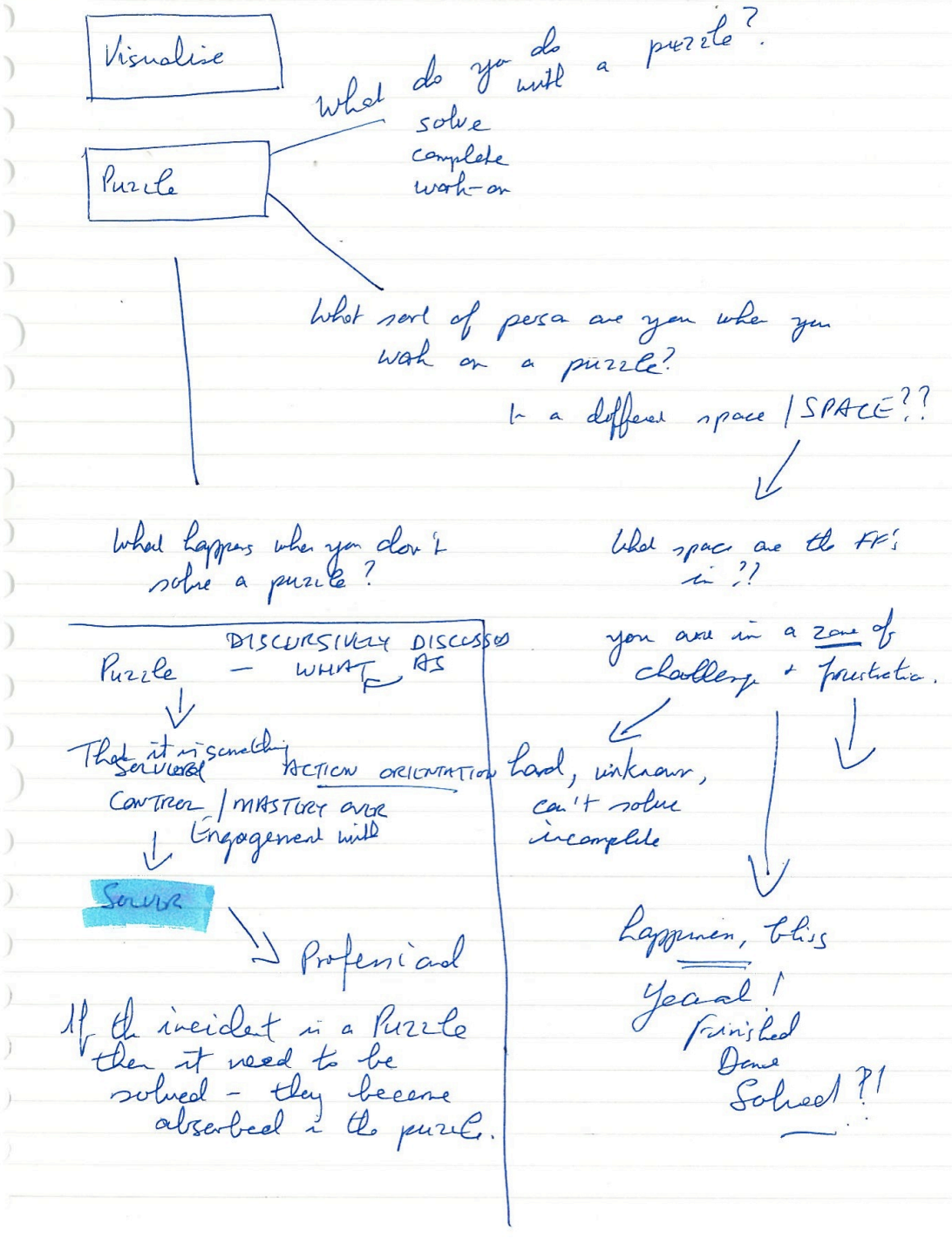
P20 It's like a puzzle I always find and you just have to solve the puzzle you know what I mean.

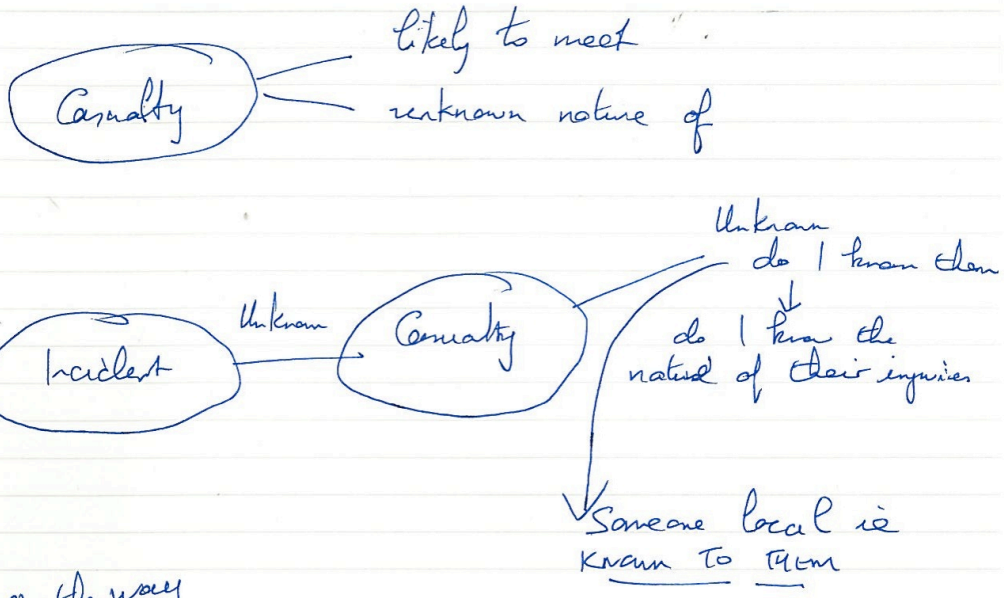
F: In what way?

P20 Like, whatever if it be a car crash. It's like a challenge as A. said, it's a job to be done and you don't even think about it you know. Just like a puzzle all the pieces fit in somewhere and it's up to you to get the puzzle right, you know what I mean.

P25 The Officer is there, they tell you right A. you're doing this, you're doing that and bang, bang, bang, you do your individual jobs and that's it. So you're not hanging around waiting to do something where you get time to think of what's in front of you. It's like get that, get this, get that. So you just go and do your individual jobs and someone would be calling, in case we need a hydro for water, chocking a car up or whatever. It's so many different things. So you actually don't have time to work out what's actually happening. It's not really stressful when you're there, to be fair. I never find it stressful when I'm actually at it. It's more stressful when you're going and you're trying to work out what's actually happening, or do I know who's going to be there.

P24 You're under a bit of pressure until you get there. But I think the best thing is the Officers, they go ahead obviously and they're the first contact with whatever either the scene or another officer. That gives us vital seconds to get a good


Visualise
Puzzle
What do you do with a puzzle?
solve
complete
work-on
What sort of pers are you when you work on a puzzle?
In a differed space / SPACE??
What happens when you don't solve a puzzle?
What space are the FF's in??
DISCURSIVELY DISCUSSED AS
Puzzle — WHAT
That it is something
SERIOUS ACTION ORIENTATION
CONTROL / MASTERY over
Engagement with
SERIOUS
Professional
If the incident is a Puzzle then it need to be solved - they become absorbed in the puzzle.
you are in a zone of challenge + frustration.
hard, unknown, can't solve incomplete
Happiness, bliss
Yeaa! Finished Done Solved?!



On the way
the
UNKOWN /
KNOWING — helps
start to visualise
imagine
figuring out what to do [Professional Space - Control.]

At the incident → GO INTO WORK MODE

Deal with what's in front of you
Don't have TIME to work ~~out~~ what if there is anything stressful ...

NOT HANGING AROUND .....
OFFICER COMMANDING / TELLING
NOT stressful when actually in it ...
Stressful on the WAY (NOT KNOWING, ANTICIPATION)
what it will be like → who the casualty actually is!

APPENDIX 7: PRELIMINARY CONCOURSE OF STATEMENTS

*Denotes those statements which were not included in the final concourse of statements.

1. Firefighters should always be offered professional counselling support after each call-out involving a fatality.
2. Over time you become hardened to the incidents you see at work.
3. I can't depend on other members of my crew to support me during an incident.
4. Seeing a dead body does not upset me.
5. The blood and gore at a scene can be difficult to deal with*
6. It is not appropriate to discuss your feelings in front of other crew members.
7. Seeing a person suffering upsets me.
8. Being upset after an incident is a sign of weakness.
9. You generally feel good when you come back from an RTA*
10. Being a firefighter is a thankless job*
11. There's actually a sense of relief when you out into another station's ground*
12. Dealing with critical incidents is not the most difficult part of a firefighter's job.
13. Dealing with members of the public at an incident can be upsetting.
14. You'd notice someone's change in behaviour. You'd pick it up*
15. The more experience and training you have the better you become at dealing with critical incidents.
16. I don't tend to talk about the incidents with my family members.
17. Talking with other crew members helps me if I feel upset by an incident.
18. The probability of knowing someone local is high*
19. I feel good about myself once I believe that I've done a good job at an incident.
20. They're always there in the back of your mind. When you get a new one they flash back the old one*
21. 'Black humour' is an important way of dealing with an incident.
22. Being a firefighter doesn't make me feel particularly good about myself.
23. A funny thing struck me – I had the same jumper*
24. If I feel upset about an incident there is someone at work that I would talk with about it.
25. You arrive, you deal with it as you find it, and that's it*
26. Not everyone is cut out to be a firefighter
27. If you feel upset about an incident then you shouldn't be in the job.
28. Having good equipment and knowing how to use it makes me feel good about myself.
29. Stress is part and parcel of every job.
30. The initial buzz will kind of take you into everything. It's after when th ejob is done that you kin dof sit back and take in what actually happened.*
31. I work a lot better when under a bit of pressure*
32. Experiencing some stress helps me perform better.
33. Helping others is one of the main reasons I like being a firefighter.
34. The incidents I have encountered through my work have upset me greatly.

35. I think a part..well not a problem..we're battle hardened most of us at this stage*
36. I am less likely to feel sympathy for a casualty if they have caused an accident through their own actions.
37. I would find it more difficult if I came across an incident while off duty.
38. It sorts of fades away until the next incident. You might think about it for a few days, then it fades away.*
39. We have families as well, so you got to think about then. You can't just be thinking about yourself.*
40. After a call we laugh and we joke, we don't go around into a deep depression.*
41. The better I get on with my colleagues the more able I am to deal with incidents.
42. Knowing who a casualty is makes responding to an incident more difficult.
43. I always wanted to be a firefighter.
44. One incident and it would always come back to me. But any other incident I seem to be able to blot them out.*
45. I believe my colleagues would think less of me if I went to see a Counsellor after an incident.
46. Being watched by the public as I do my job can place more pressure on an already difficult situation.
47. I hate to see anyone suffering.*
48. It is better to block incidents out of your mind than talk about them with others.
49. Hearing colleagues talk about incidents they have dealt with helps me prepare for similar incidents.
50. I think all this talk about stress and trauma is a load of nonsense.
51. There's always someone there who is going to make a comment that will make you laugh.*
52. We managed to deal just as well with incidents before the introduction of a Critical Incident Stress Management (CISM) programme.
53. Talking among ourselves is the most effective way of dealing with the impact of an incident.
54. We just had to get on with it like. There wasn't any help. You just had to get on with it.*
55. How you react to an incident depends very much on how you feel on the day itself.
56. The most stressful thing is a piece of equipment not working.
57. If there was no one slagging you'd know there was something wrong.*
58. An RTA with dead people is the easiest RTA you can go out to because there's no panic.
59. Going for a meal or a drink with the crew after an incident helps enormously.
60. Dealing with blood and gore is the most difficult aspect of a firefighter's job.
61. Looking out for and looking after each other is crucial in this job.
62. You'd be surprised when someone's behaviour changes when you're working with them – you'd notice it.*
63. As my children get older I find it harder as well.*
64. Once you know what you're dealing with you can usually manage to deal

with it OK.
65. It shouldn't be compulsory to participate in a group discussion after an incident.
66. After an incident I tend to question myself to see if I could have done any better.
67. When you arrive at a scene you go into work mode so you don't have time to work out if anything stressful is happening.
68. You try not to talk about it. It's kind of confidential enough too to the person it happened to. You kind of blow it over if you can.*
69. I mean would we know each other nearly well enough as a group? It isn't as fi we are complete strangers to each other.*
70. Trying to anticipate what's ahead of you as you go to an incident can be more stressful than actually being at it.
71. An incident which is ongoing (e.g. house fire, chemical spills) puts you in greater danger and is therefore more demanding to deal with.
72. Once your own life isn't in danger, most incidents can be straightforward to deal with.
73. I can feel sad and upset after an incident but not stressed.
74. Your first dead body is the worst one you're going to be at.
75. We're a young enough crew, we understand. There could be two or three auld fellows here running the show who mightn't understand.*
76. The more decisions you have to make the harder it is.*
77. There is no great comfort in being part of an effective crew.
78. As soon as the pager goes off you prepare yourself to deal with the worst situation.
79. You seem to bury incidents in the back of your mind. You stow them away. It doesn't affect you but it's there.
80. I think it's great when you get home and you're chatting. It's another part of unwinding and getting it out of the system.*
81. It's nice to know that there's a support programme in place for firefighters. You never know when you might need it.
82. I wouldn't know if a member of my crew wasn't coping well after an incident.
83. I would be reluctant to seek help from a Counsellor.
84. Seeking counselling is a sign of weakness.
85. But this person would eat iron for you outside*
86. The last decent fire we had…I actually enjoyed it.*
87. Unfortunately it's a job that you're in – it's other people's misfortunes. That's realistic.*
88. Talking about how I feel in front of other crew members is very difficult.
89. A Counsellor should drop by the crew once a year to see how they are doing.
90. A good strategy to deal with stress is to block incidents out of your mind.
91. I was thirteen years in the service before I met a "body".*
92. An RTA with dead people is the easiest RTA you can go out to like cause there's no panic.
93. You expect to come across difficult situations in this job.
94. I enjoy being a firefighter because the money is very good.

95. Debriefing discussions should address training needs as well as psychological needs.
96. An essential part of being a firefighter is to keep up with new techniques and procedures.
97. I suppose the first fellow that we pulled out that was fairly badly burned. That night we went away and had a good session that night.*
98. You can tell an effective crew by the care and attention they pay to their rig and equipment.
99. I'm very happy with the way the current debriefing programme is structured.
100. I'd be happy to talk with a Counsellor if I was feeling stressed.
101. In fairness we always talk. We always talk before an incident is over.
102. You're not going to go in and get yourself killed either. You use your common sense like.*
103. Part of a firefighter's job is to take care of their own health and well-being , to maximise their effectiveness at work.
104. Firefighters need to be mentally well to be effective in such a high risk job.

APPENDIX 8: FINAL CONCOURSE OF STATEMENTS

1. Firefighters should always be offered professional counselling support after each call-out involving a fatality.
2. Over time you become hardened to the incidents you see at work.
3. I can't depend on other members of my crew to support me during an incident.
4. Seeing a dead body does not upset me.
5. It is not appropriate to discuss your feelings in front of other crew members.
6. Seeing a person suffering upsets me.
7. Being upset after an incident is a sign of weakness.
8. Dealing with critical incidents is not the most difficult part of a firefighter's job.
9. Dealing with members of the public at an incident can be upsetting.
10. The more experience and training you have the better you become at dealing with critical incidents.
11. I don't tend to talk about the incidents with my family members.
12. Talking with other crew members helps me if I feel upset by an incident.
13. I feel good about myself once I believe that I've done a good job at an incident.
14. 'Black humour' is an important way of dealing with an incident.
15. Being a firefighter doesn't make me feel particularly good about myself.
16. If I feel upset about an incident there is someone at work that I would talk with about it.
17. Not everyone is cut out to be a firefighter
18. If you feel upset about an incident then you shouldn't be in the job.
19. Having good equipment and knowing how to use it makes me feel good about myself.
20. Stress is part and parcel of every job.
21. Experiencing some stress helps me perform better.
22. Helping others is one of the main reasons I like being a firefighter.
23. The incidents I have encountered through my work have upset me greatly.
24. I am less likely to feel sympathy for a casualty if they have caused an accident through their own actions.
25. I would find it more difficult if I came across an incident while off duty.
26. The better I get on with my colleagues the more able I am to deal with incidents.
27. Knowing who a casualty is makes responding to an incident more difficult.
28. I always wanted to be a firefighter.
29. I believe my colleagues would think less of me if I went to see a Counsellor after an incident.
30. Being watched by the public as I do my job can place more pressure on an already difficult situation.
31. It is better to block incidents out of your mind than talk about them with others.
32. Hearing colleagues talk about incidents they have dealt with helps me prepare for similar incidents.
33. I think all this talk about stress and trauma is a load of nonsense.

34. We managed to deal just as well with incidents before the introduction of a Critical Incident Stress Management (CISM) programme.
35. Talking among ourselves is the most effective way of dealing with the impact of an incident.
36. How you react to an incident depends very much on how you feel on the day itself.
37. The most stressful thing is a piece of equipment not working.
38. An RTA with dead people is the easiest RTA you can go out to because there's no panic.
39. Going for a meal or a drink with the crew after an incident helps enormously.
40. Dealing with blood and gore is the most difficult aspect of a firefighter's job.
41. Looking out for and looking after each other is crucial in this job.
42. Once you know what you're dealing with you can usually manage to deal with it OK.
43. It shouldn't be compulsory to participate in a group discussion after an incident.
44. After an incident I tend to question myself to see if I could have done any better.
45. When you arrive at a scene you go into work mode so you don't have time to work out if anything stressful is happening.
46. Trying to anticipate what's ahead of you as you go to an incident can be more stressful than actually being at it.
47. An incident which is ongoing (e.g. house fire, chemical spills) puts you in greater danger and is therefore more demanding to deal with.
48. Once your own life isn't in danger, most incidents can be straightforward to deal with.
49. I can feel sad and upset after an incident but not stressed.
50. Your first dead body is the worst one you're going to be at.
51. There is no great comfort in being part of an effective crew.
52. As soon as the pager goes off you prepare yourself to deal with the worst situation.
53. You seem to bury incidents in the back of your mind. You stow them away. It doesn't affect you but it's there.
54. It's nice to know that there's a support programme in place for firefighters. You never know when you might need it.
55. I wouldn't know if a member of my crew wasn't coping well after an incident.
56. I would be reluctant to seek help from a Counsellor.
57. Seeking counselling is a sign of weakness.
58. Talking about how I feel in front of other crew members is very difficult.
59. A Counsellor should drop by the crew once a year to see how they are doing.
60. A good strategy to deal with stress is to block incidents out of your mind.
61. You expect to come across difficult situations in this job.
62. I enjoy being a firefighter because the money is very good.
63. Debriefing discussions should address training needs as well as

psychological needs.
64. An essential part of being a firefighter is to keep up with new techniques and procedures.
65. You can tell an effective crew by the care and attention they pay to their rig and equipment.
66. I'm very happy with the way the current debriefing programme is structured.
67. I'd be happy to talk with a Counsellor if I was feeling stressed.
68. Part of a firefighter's job is to take care of their own health and well-being , to maximise their effectiveness at work.
69. Firefighters need to be mentally well to be effective in such a high risk job.

APPENDIX 9 CORRELATION MATRIX

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Path and Project Name: C:\PQMETHOD/JOEUELST Dec 04 09

Correlation Matrix Between Sorts

SORTS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1 01	100	92	47	52	56	54	62	27	54	61	71	56	67	66	66	59	59	61	64	64	57	48	66	67	70	45	57	72	86	88
2 02	92	100	53	54	59	61	63	36	52	68	79	62	75	72	73	71	71	72	75	72	66	57	74	75	75	53	65	82	95	96
3 03	47	53	100	94	94	93	69	44	50	43	54	69	62	73	69	61	56	60	58	59	48	46	54	60	73	55	45	65	48	52
4 04	52	54	94	100	93	93	68	46	53	45	56	68	64	75	69	62	58	61	60	61	47	47	58	59	73	54	50	66	51	53
5 05	56	59	94	93	100	96	68	48	56	42	58	73	65	74	69	61	56	59	58	61	49	47	57	62	73	62	46	69	54	59
6 06	54	61	93	93	96	100	68	54	58	48	61	75	69	77	74	65	61	63	62	64	53	55	61	64	77	64	52	71	56	61
7 07	62	63	69	68	68	68	100	43	64	56	51	70	68	62	75	65	62	65	65	66	57	40	60	65	60	31	41	63	59	61
8 08	27	36	44	46	48	54	43	100	30	35	38	50	37	48	48	39	35	34	36	39	56	59	60	42	41	34	26	47	30	36
9 09	54	52	50	53	56	58	64	30	100	45	45	51	64	53	57	41	42	42	41	47	41	34	40	52	54	47	35	47	43	49
10 10	61	68	43	45	42	48	56	35	45	100	71	39	53	57	67	61	58	61	63	60	50	50	57	58	58	39	67	61	69	68
11 62 15 3	71	79	54	56	58	61	51	38	45	71	100	48	60	69	64	62	60	62	64	69	55	53	62	61	75	53	66	70	78	76
12 12	56	62	69	68	73	75	70	50	51	39	48	100	74	68	73	61	60	58	58	60	63	57	60	59	66	54	46	66	54	62
13 62 15 51	67	75	62	64	65	69	68	37	64	53	60	74	100	66	78	66	66	66	66	66	60	53	58	69	67	46	58	65	69	70
14 14	66	72	73	75	74	77	62	48	53	57	69	68	66	100	73	67	66	66	66	70	53	55	61	58	85	59	65	71	67	68
15 15	66	73	69	69	69	74	75	48	57	67	64	73	78	73	100	76	73	75	75	77	55	54	63	71	74	51	56	74	70	71
16 16	59	71	61	62	61	65	65	39	41	61	62	61	66	67	76	100	98	98	97	90	57	48	67	70	64	48	59	74	72	70
17 17	59	71	56	58	56	61	62	35	42	58	60	60	66	66	73	98	100	96	95	88	57	48	66	67	61	48	59	71	71	70
18 18	61	72	60	61	59	63	65	34	42	61	62	58	66	66	75	98	96	100	99	89	54	46	64	71	65	46	60	74	72	70
19 19	64	75	58	60	58	62	65	36	41	63	64	58	66	66	75	97	95	99	100	90	55	49	67	72	66	45	61	76	75	73
20 20	64	72	59	61	61	64	66	39	47	60	69	60	66	70	77	90	88	89	90	100	56	45	70	68	67	48	63	73	70	71
21 21	57	66	48	47	49	53	57	56	41	50	55	63	60	53	55	57	57	54	55	56	100	74	79	68	50	36	41	63	58	68
22 22	48	57	46	47	47	55	40	59	34	50	53	57	53	55	54	48	48	46	49	45	74	100	63	49	52	44	42	56	54	59
23 23	66	74	54	58	57	61	60	60	40	57	62	60	58	61	63	67	66	64	67	70	79	63	100	76	62	41	51	80	67	72
24 24	67	75	60	59	62	64	65	42	52	58	61	59	69	58	71	70	67	71	72	68	68	49	76	100	61	42	52	80	71	73
25 25	70	75	73	73	73	77	60	41	54	58	75	66	67	85	74	64	61	65	66	67	50	52	62	61	100	67	64	76	71	73
26 26	45	53	55	54	62	64	31	34	47	39	53	54	46	59	51	48	48	46	45	48	36	44	41	42	67	100	51	59	47	54
27 27	57	65	45	50	46	52	41	26	35	67	66	46	58	65	56	59	59	60	61	63	41	42	51	52	64	51	100	58	61	68
28 28	72	82	65	66	69	71	63	47	47	61	70	66	65	71	74	74	71	74	76	73	63	56	80	80	76	59	58	100	76	80
29 29	86	95	48	51	54	56	59	30	43	69	78	54	69	67	70	72	71	72	75	70	58	54	67	71	71	47	61	76	100	92
30 30	88	96	52	53	59	61	61	36	49	68	76	62	70	68	71	70	70	70	73	71	68	59	72	73	73	54	68	80	92	100
31 31	37	48	41	47	44	50	45	77	23	40	50	47	43	45	48	51	49	48	49	52	75	73	74	56	39	28	34	57	46	47
32 32	50	56	51	53	53	59	52	61	33	47	50	55	51	52	63	61	58	57	59	59	73	70	76	69	49	33	40	67	54	59
33 33	66	77	62	64	64	67	71	45	51	64	67	72	73	70	77	71	68	70	70	73	68	51	71	78	69	46	66	74	75	75
34 34	76	81	51	59	56	62	68	42	51	67	69	61	74	68	77	73	72	73	75	73	59	53	70	70	67	41	60	68	79	75
35 35	62	70	70	72	70	74	59	47	46	49	68	70	67	71	72	69	69	66	69	76	57	49	72	65	75	58	56	72	66	68
36 36	68	77	63	68	67	71	58	48	44	54	74	73	70	72	74	71	71	67	70	77	61	54	75	65	78	63	64	76	72	76
37 37	68	77	66	66	69	72	58	41	45	58	68	64	65	69	76	75	72	75	75	78	57	54	71	73	70	61	64	83	73	78
38 38	70	80	48	52	55	59	57	30	39	58	71	65	66	68	67	67	67	68	70	70	59	52	64	66	70	55	69	80	78	80
39 39	66	79	69	71	71	75	62	44	43	62	70	70	75	68	72	75	75	74	76	73	69	66	74	75	71	53	67	75	76	78
40 40	68	69	65	69	69	70	65	39	56	48	53	61	61	75	74	65	64	65	66	66	49	48	61	58	70	52	41	76	64	67

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Correlation Matrix Between Sorts

SORTS	31	32	33	34	35	36	37	38	39	40
1 01	37	50	66	76	62	68	68	70	66	68
2 02	48	56	77	81	70	77	77	80	79	69
3 03	41	51	62	51	70	63	66	48	69	65
4 04	47	53	64	59	72	68	66	52	71	69
5 05	44	53	64	56	70	67	69	55	71	69
6 06	50	59	67	62	74	71	72	59	75	70
7 07	45	52	71	68	59	58	58	57	62	65
8 08	77	61	45	42	47	48	41	30	44	39
9 09	23	33	51	51	46	44	45	39	43	56
10 10	40	47	64	67	49	54	58	58	62	48
11 62 15 3	50	50	67	69	68	74	68	71	70	53
12 12	47	55	72	61	70	73	64	65	70	61
13 62 15 51	43	51	73	74	67	70	65	66	75	61
14 14	45	52	70	68	71	72	69	68	68	75
15 15	48	63	77	77	72	74	76	67	72	74
16 16	51	61	71	73	69	71	75	67	75	65
17 17	49	58	68	72	69	71	72	67	75	64
18 18	48	57	70	73	66	67	75	68	74	65
19 19	49	59	70	75	69	70	75	70	76	66
20 20	52	59	73	73	76	77	78	70	73	66
21 21	75	73	68	59	57	61	57	59	69	49
22 22	73	70	51	53	49	54	54	52	66	48
23 23	74	76	71	70	72	75	71	64	74	61
24 24	56	69	78	70	65	65	73	66	75	58
25 25	39	49	69	67	75	78	70	70	71	70
26 26	28	33	46	41	58	63	61	55	53	52
27 27	34	40	66	60	56	64	64	69	67	41
28 28	57	67	74	68	72	76	83	80	75	76
29 29	46	54	75	79	66	72	73	78	76	64
30 30	47	59	75	75	68	76	78	80	78	67
31 31	100	77	58	56	48	53	56	43	63	43
32 32	77	100	61	59	52	56	63	50	67	56
33 33	58	61	100	77	72	76	74	78	84	59
34 34	56	59	77	100	69	76	67	68	76	65
35 35	48	52	72	69	100	94	70	65	76	61
36 36	53	56	76	76	94	100	75	75	81	60
37 37	56	63	74	67	70	75	100	75	79	69
38 38	43	50	78	68	65	75	75	100	79	62
39 39	63	67	84	76	76	81	79	79	100	61
40 40	43	56	59	65	61	60	69	62	61	100

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Unrotated Factor Matrix

	Factors						
	1	2	3	4	5	6	7
SORTS							
1 01	0.7879	0.1499	-0.3267	0.1119	0.1069	0.0105	0.2454
2 02	0.8834	0.0830	-0.3624	0.1140	0.0640	0.0038	0.1236

APPENDIX 10: FACTOR ARRAYS 1 TO 4

Factor Array 1

-5	-4	-3	-2	-1	0	1	2	3	4	5
I can't depend on other members of my crew to support me during an incident	Fire fighters should always be offered professional counselling after each call-out involving a fatality	Being upset after an incident is a sign of weakness	It is not appropriate to discuss your feelings in front of other crew members	Seeing a person suffering upsets me	Dealing with members of the public at an incident can be upsetting	"Black humour" is an important way of dealing with an incident	Seeing a dead body does not upset me	I feel good about myself once I believe that I've done a good job at an incident	Over time you become hardened to the incidents you see at work	Dealing with "critical incidents" is not the most difficult part of a Fire Fighter's job
Being a "fire Fighter" doesn't make me feel particularly good about myself.	I don't tend to talk about the incidents with my family members	The incidents I have encountered through my work have upset me greatly	Not everyone is cut out to be a Fire Fighter	I believe my colleagues would think less of me if I went to see a Counsellor after an incident	Talking with other crew members helps me if I feel upset by an incident	Helping others is one of the main reasons I like being a Fire Fighter	Stress is part an parcel of every job	Having good equipment and knowing how to use it makes me feel good about myself	The more experience and training you have the better you become at dealing with "critical incidents"	Knowing who the casualty is makes responding to an incident more difficult
There's no great comfort in being part of an effective crew	If you feel upset about an incident then you shouldn't be in the job	I would be reluctant to seek help from a Counsellor	I would find it more difficult if I came across an incident while off duty	I think all the talk about stress and trauma is a load of nonsense	If I feel upset about an incident there is someone at work that I would talk with about it	I always wanted to be a FF	Experiencing some stress helps me perform better	How you react to an incident depends very much on how you feel on the day itself	The most stressful thing is a piece of equipment not working	When you arrive at a scene you go into work mode and you don't have time to work out if anything stressful is happening
I enjoy being a FF because the money is very good	I wouldn't know if a member of my crew wasn't coping well after an incident	Seeking help is a sign of weakness	Being watched by the public as I do my job can place more pressure on an already difficult situation	Trying to anticipate what's ahead of you as you go to an incident can be more stressful than actually being at it	I am less likely to feel sympathy for a casualty if they have caused an accident through their own actions	Talking among ourselves is the most effective way of dealing with the impact of an incident	An RTA with dead people is the easiest RTA you can go out to because there is no panic	Dealing with blood and gore is the most difficult aspect of a FF's job	Once you know what you're dealing with you can usually manage to deal with it OK	An incident which is ongoing puts you in greater danger and is therefore more demanding to deal with
	You can tell an effective crew by the care and attention they pay to their rig and equipment	Debriefing discussions should address training needs as well as psychological needs	It is better to block incidents out of your mind than talk about them with others	As soon as the pager goes off you prepare yourself to deal with the worst situation	The better I get on with my colleagues the more able I am to deal with incidents	Going for a meal or a drink with the crew after an incident helps enormously	It shouldn't be compulsory to participate in a group discussion after an incident	Once your own life isn't in danger, most incidents can be straightforward to deal with	You expect to come across difficult situations in this job	
			We managed to deal just as well with incidents before the introduction of a CISM programme	Talking about how I feel in front of other crew members is very difficult.	Hearing colleagues talk about incidents that have dealt with helps me to prepare for similar incidents	I can feel sad and upset after an incident but not stressed	You seem to bury incidents in the back of your mind. You stow them away. It doesn't affect you but it's there.			
			A Counsellor should drop by the crew once a year to see how they are doing	I'm very happy with the way the current debriefing programme is structured	Looking out for and looking after each other is critical in this job	A good strategy to deal with stress is to block the incidents out of your mind	An essential part of being a FF is to keep up with new techniques and procedures			
				FF's need to be mentally well if they are to be effective in such a high risk job.	After an incident I tend to question myself to see if I could have done any better	Part of a FF's job is to take care of their own health and well-being to maximise their effectiveness at work.				
					Your first dead body is the worst one you're going to be at					
					It's nice to know that there's a support programme in place for FF. You never know when you might need it					

Factor Array 2

-5	-4	-3	-2	-1	0	1	2	3	4	5
FF should always be offered professional counselling	Being a Fire Fighter doesn't make me feel particularly good about myself	Being upset after an incident is a sign of weakness	The better I get on with my colleague the more able I am to deal with incidents	Dealing with members of the public at an incident can be upsetting	Having good equipment and knowing how to use it makes me feel good about myself	Over time you become hardened to the incidents you see at work	I feel good about myself once I believe that I've done a good job at an incident	Dealing with "critical incidents" is not the most difficult part of a FF's job	Seeing a dead body does not upset me	Talking with other crew members helps me if I feel upset by an incident.
I can't depend on other members of my crew to support me during an incident	If you feel upset about an incident then you shouldn't be in the job	I don't tend to talk about the incidents with my family members	It is better to block incidents out of your mind than talk them with others	If I feel upset about an incident there is someone at work that I would talk with about it	I am less likely to feel sympathy for a casualty if they have caused an accident through their own actions	Seeing a person suffering upsets me	Stress is part and parcel of every job	I think all this talk about stress and trauma is a load of nonsense	It is not appropriate to discuss your feelings in front of other crew members	Experiencing some stress helps me perform better
I enjoy being a FF because the money is very good	The incidents I have encountered through my work have upset me greatly	Dealing with blood and gore is the most difficult aspect of a FF's job	I can feel sad and upset after an incident but not stressed	Not everyone is cut out to be a FF	I believe my colleagues would think less of me if I went to see a Counsellor after an incident	The more experience and training you have the better you become at dealing with "critical incidents"	Being watched by the public as I do my job can place more pressure on an already difficult situation	Once you know what you're dealing with you can usually manage to deal with it OK	The most stressful thing is a piece of equipment not working	Helping others is one of the main reasons I like being a FF
Debriefing discussions should address training needs as well as psychological needs	I always wanted to be a FF	Your first dead body is the worst one you're going to be at	You seem to bury incidents in the back of your mind. You stow them away. It doesn't affect you but it's there.	Hearing colleagues talk about incidents they have dealt with helps me to prepare for similar incidents	We managed to deal just as well with incidents before the introduction of a CISM programme	"Black humour" is an important way of dealing with an incident	How you react to an incident depends very much on how you feel on the day itself	An incident which is ongoing puts you in greater danger and is therefore more demanding to deal with	An RTA with dead people is the easiest RTA you can go to because there's no panic	When you arrive at a scene you go into work mode so you don't have to work out if anything stressful is happening
	You can tell an effective crew by the care and attention they pay to their rig and equipment	A Counsellor should drop by the crew once a year to see how they are doing.	Seeking counselling is a sign of weakness	Looking out for an looking after each other is crucial in this job	Going for a meal or a drink with the crew after an incident helps enormously	I would find it more difficult if I came across an incident while off duty	It's nice to know that there's a support programme in place for FF. You never know when you might need it.	Talking about how I feel in front of other crew members is very difficult	You expect to come across difficult situations in this job	
			A good strategy to deal with stress is to block incidents out of your mind	Trying to anticipate what's ahead of you as you go to an incident can be more stressful than actually being at it	It shouldn't be compulsory to participate in a group discussion after an incident	Knowing who a casualty is makes responding to an incident more difficult	I would be reluctant to seek help from a Counsellor			
			Part of a FF's job is to take care of their own health and well-being to maximise their effectiveness at work	As soon as the pager goes off you prepare yourself to deal with the worst situation	Once your own life isn't in danger most incidents can be straightforward to deal with	Talking among ourselves is the most effective way of dealing with the impact of an incident	I'd be happy to talk with a Counsellor if I was feeling stressed			
				I wouldn't know if a member of my crew wasn't coping well after an incident	There's no great comfort in being part of an effective crew	After an incident I tend to question myself to see if I could have done any better				
					An essential part of being a FF is to keep up with new techniques and procedures					
					I'm very happy with the way the current debriefing programme is structured					
					FF need to be mentally well to be effective in such a					

Factor Array 3

-5	-4	-3	-2	-1	0	1	2	3	4	5
I can't depend on other members of the crew to support me during an incident	Being upset after an incident is a sign of weakness	FF should always be offered professional counselling support after each call-out involving a fatality.	Not everyone is cut out to be a FF	Over time you become hardened to the incidents you see at work	Seeing a person suffering upsets me	It is not appropriate to discuss your feelings in front of other crew members	Seeing a dead body does not upset me	The more experience and training you have the better you become at dealing with "critical incidents"	Helping others is one of the main reasons I became a FF	I am less likely to feel sympathy for a casualty if they have caused an accident through their own actions
Being a FF doesn't make me feel particularly good about myself	Dealing with "critical incidents" is not the most difficult part of a FF's job	I don't tend to talk about incidents with my family members	I would find it more difficult is I came across an incident while off duty	Stress is part and parcel of every job	Dealing with members of the public at an incident can be upsetting	The better I get on with my colleagues the more able I am to deal with incidents	I feel good about myself once I believe that I've done a good job at an incident	Having good equipment and knowing how to use it makes me feel good about myself	Knowing who a casualty is makes responding to an incident more difficult	How you react to an incident depends very much on how you feel on the day itself
There's no great comfort in being part of an effective crew	If you feel upset about an incident then you shouldn't be in the job	I always wanted to be a FF	Being watched by the public as I do my job can place more pressure on an already difficult situation	Experiencing some stress helps me perform better	Talking with other crew members helps me if I feel upset by an incident	I believe my colleagues would think less of me if I went to see a counsellor after an incident	"Black humour" is an important way of dealing with an incident	An RTA with dead people is the easiest RTA you can go to because there's no panic	The most stressful thing is a piece of equipment not working	After an incident I tend to question myself to see if I could have done any better
I enjoy being a FF because the money is good	The incidents I have encountered through my work have upset me greatly	I wouldn't know if a member of my crew wasn't coping well after an incident.	I think all this talk about stress and trauma is a load of nonsense	We managed to deal just as well with incidents before the introduction of a CISM programme	If I feel upset about an incident there is someone at work that I would talk about it	Hearing colleagues talk about incidents they have dealt with helps me to prepare for similar incidents	I can feel sad and upset after an incident but not stressed	Going for a mean or a drink with the crew after an incident helps enormously	Once you know what you're dealing with you can usually manage to deal with it OK	Once your own life isn't in danger, most incidents can be straightforward to deal with
	Dealing with blood and gore is the most difficult aspect of a FF's job	Debriefing discussions should address training needs as well as psychological needs	I would be reluctant to seek help from a Counsellor	Your first dead body is the worst one you're going to be at	It is better to block incidents out of your mind than talk about them with others	Talking among ourselves is the most effective way of dealing with the impact of an incident	An incident which is ongoing puts you in greater danger and is therefore more demanding to deal with	Looking out for and after ach other is crucial in this job	When you arrive at a scene you go into work mode so you don't have time to work out if anything stressful is happening	
			Seeking counselling is a sign of weakness	Talking about how I feel in front of other crew members is very difficult	Trying to anticipate what's ahead o f you as you go to an incident can be more stressful than actually being at it.	It shouldn't be compulsory to participate in a group discussion after an incident	It's nice to know that there's a support programme in place for FF. You never know when you might need it.			
			I'd be happy to talk with a Counsellor if I was feeling stressed	You can tell an effective crew by the care and attention they pay to their rig and equipment	As soon as the pager goes off you prepare yourself to deal with the worst situation	You seem to bury incidents in the back of your mind. You stow them away. It doesn't affect you but it's there.	An essential part of being a FF is to keep up with new techniques and procedures			
				I'm very happy with the way the current debriefing programme is structured	A Counsellor should drop by the crew once a year to see how they are doing	You expect to come across difficult situations in this job				
					A good strategy to deal with stress is to block incidents out of your mind					
					Part of a FF's job is to take care of their own health and well-being to maximise their effectiveness at work					
					FF need to be mentally well to be effective in such a high risk job					

Factor Array 4

-5	-4	-3	-2	-1	0	1	2	3	4	5
I can't depend on other members of my crew to support me during an incident	FF should always be offered professional counselling after each call-out involving a fatality	The incidents I have encountered through my work have upset me greatly	Being upset after an incident is a sign of weakness	It is not appropriate to discuss your feelings in front of other crew members	Seeing a dead body does not upset me	Seeing a person suffering upsets me	Over time you become hardened to the incidents you see at work	"Black humour" is an important way of dealing with an incident	I feel good about myself once I believe that I've done a good job at an incident	Dealing with "critical incidents" is not the most difficult part of a FF's job
There's no great comfort being part of an effective crew	Being a FF doesn't make me feel particularly good about myself	Dealing with blood and gore is the most difficult aspect of a FF's job	If you feel upset about an incident then you shouldn't be in the job	Not everyone is cut out to be a FF	Dealing with members of the public at an incident can be upsetting	I don't tend to talk about the incidents with my family members	Talking with other crew members helps me if I feel upset by an incident	If I feel upset about an incident there is someone at work that I would talk with about it	Having good equipment and knowing how to use it makes me feel good about myself	The more experience and training you have the better you become at dealing with "critical incidents"
I wouldn't know if a member of my crew wasn't coping well after an incident	I think all this talk about stress and trauma is a load of non-sense	Your first dead body is the worst one you're going to be at	I believe my colleagues would think less of me if I went to see a Counsellor after an incident	I am less likely to feel sympathy for a casualty if they have caused an accident through their own actions	Experiencing some stress helps me perform better	Stress is part and parcel of every job	Once you know what you're dealing with you can usually manage to deal with it OK	The better I get on with my colleagues the more able I am to deal with incidents	Knowing who a casualty is makes responding to an incident more difficult	How you react to an incident depends very much on how you feel on the day itself
I enjoy being a FF because the money is very good	A Counsellor should drop by the crew once a year to see how they are doing	I would be reluctant to seek help from a Counsellor	It is better to block incidents out of your mind than talk about them with others	Being watched by the public as I do my job can place more pressure on an already difficult situation	Helping others is one of the main reasons I like being a FF	Looking out for and after each other is crucial in this job	After an incident I tend to question myself to see if I could have done any better	An incident which is ongoing puts you in greater danger and is therefore more demanding to deal with	Talking among ourselves is the most effective way of dealing with the impact of an incident	The most stressful thing is a piece of equipment not working
	You can tell an effective crew by the care and attention they pay to their rig and equipment	Debriefing discussions should address training as well as psychological needs	We managed to deal just as well with incidents before the introduction of a CISM programme	Hearing colleagues talk about incidents they have dealt with helps me to prepare for similar incidents	I would find it more difficult if I came across an incident while off duty	I can feel sad and upset after an incident but not stressed	When you arrive at a scene you go into work mode so you don't have time to work out if anything stressful is happening	Once your own life isn't in danger most incidents can be straightforward to deal with	Going for a meal or a drink with the crew after an incident helps enormously	
			Seeking counselling is a sign of weakness	Trying to anticipate what's ahead of you as you go to an incident can be more stressful than actually being at it	I always wanted to be a FF	It's nice to know that there's a support programme in place for FF. You never know when you might need it	You expect to come across difficult situations in this job			
			A good strategy to deal with stress is to block incidents out of your mind	FF's need to be mentally well to be effective in such a high risk job.	An RTA with dead people is the easiest RTA you can go out to because there is no panic	Talking about how I feel in front of other crew members is very difficult	An essential part of being a FF is to keep up with new techniques and procedures			
				As soon as the pager goes off you prepare yourself to deal with the worst situation	It shouldn't be compulsory to participate in a group discussion after an incident	I'd be happy to talk with a Counsellor if I was feeling stressed				
					You seem to bury incidents in the back of your mind. You stow them away. It doesn't affect you but it's there					
					I'm very happy with the way the current debriefing programme is structured					
					Part of a FF's job is to take care of their own health and well-being to maximise their effectiveness at work					

APPENDIX 11

ADDITIONAL PARTICIPANT'S COMMENTS - STUDY 2, CHAPTER 5

P91: "They have the chance to see it up front and learn how to deal with it."

P92: "There's nothing I'd include. You get on and deal with them as best you can."

P98: "Sure we all know what it's like but you have to get on with it yourself like. We can be there but we can't do it for you."

P100: "It's hard to choose which way to go with them. Some of them you really have to think about."

P102: "The most important thing no matter what the shout us…it's these boys who'll get you through it."

P107: You'd be knackered after some of them. You wouldn't want to see one like it for another while."

P110: "Every incident can be sad or lucky in its own way. What I need to know is how I can help them as best I can. I can't worry about the other stuff."

P112: "You definitely feel under pressure to get the guy out but you know you can do it. Even if it does no good for him you know that you did all you could."

P115: "I know that everyone here will go through hell on earth to make it alright so what more can I ask for."

P119: "It took some time – it seemed easy at first till you got into it."

P126: "You'd feel for the misfortunates."

P127: "You'd want to do everything you could for the poor misfortunate."

P132: "You'd think it was easy at first, but you'd be pushed to know where to put it (the card) at times."

P133: "I wouldn't want to do too many of these yokes. They'd kill you."

P140: "I haven't seen any really bad one yet. I've come across some fatalities but they were ok."

APPENDIX 12

WELL-BEING AT WORK

A RESOURCE GUIDE FOR MEMBERS OF

THE FIRE SERVICE

Welcome

Maintaining health and well-being is an important priority for most people. Being healthy is one of the most valuable gifts that we can have.

The title 'Well-Being at Work' is deliberate. It is designed to highlight two aspects of the nature of well-being. First and foremost it aims to highlight how well-being itself is a process, which we as individuals work with on a day-to-day basis. Our thoughts, feelings and behaviours tend to happen without our being conscious of them. They work continually, almost unnoticed. What we tend to overlook is that these processes are something which we can change. By attending to them we can be happier and healthier in ourselves and deal with whatever challenges we face in life.

The second aspect of well-being at work is that the title deliberately refers to the fact that our work is an important part of our well-being. Work is a hugely significant part of people's lives. When work is good it gives us money, identity, friendships, social status and opportunity. It can develop us mentally, physically and emotionally. In terms of our well-being the work that we do, the people that we work with, the environment that we do it in, the recognition that we get for it, are all key factors in both sustaining and developing our well-being as individuals.

This resource guide has specifically been developed for members of the Fire Service. The reason why it has been produced is that it aims to sustain and support individual firefighters, fire crews and indeed Fire Services as a whole in the work that they do. It comes from listening to members of the Fire Services throughout Ireland, and is based on the most recent research on how best firefighters can work at sustaining themselves and each other in the face of the emergency situations that they encounter. It seeks to learn from some of the key lessons on well-being that have been learned from these fire crews.

In addition, the resource guide is based on learning from the 'best practice' which exists within other Fire Services throughout the world. It has looked at the research on stress, and evaluated it in the light of how Firefighters deal with the stress they encounter in the course of their work.

Ultimately, this resource guide aims to take the issue of your well-being seriously. It highlights the ways in which each individual can work at improving their well-being by attending to themselves. Equally, it wants to draw attention to how important other people are both in terms of sustaining us at key times, and how our relationships with colleagues can profoundly affect our well-being at work. Finally, this resource offers some practical and professional resources aimed at sustaining each and every member of the Fire Service. It seeks to strike that balance between giving confidence in the capability of each individual and crew to learn how to deal with the challenges which will be presented at work, while at the same time ensuring that professional support is available when it's needed.

CONTENTS

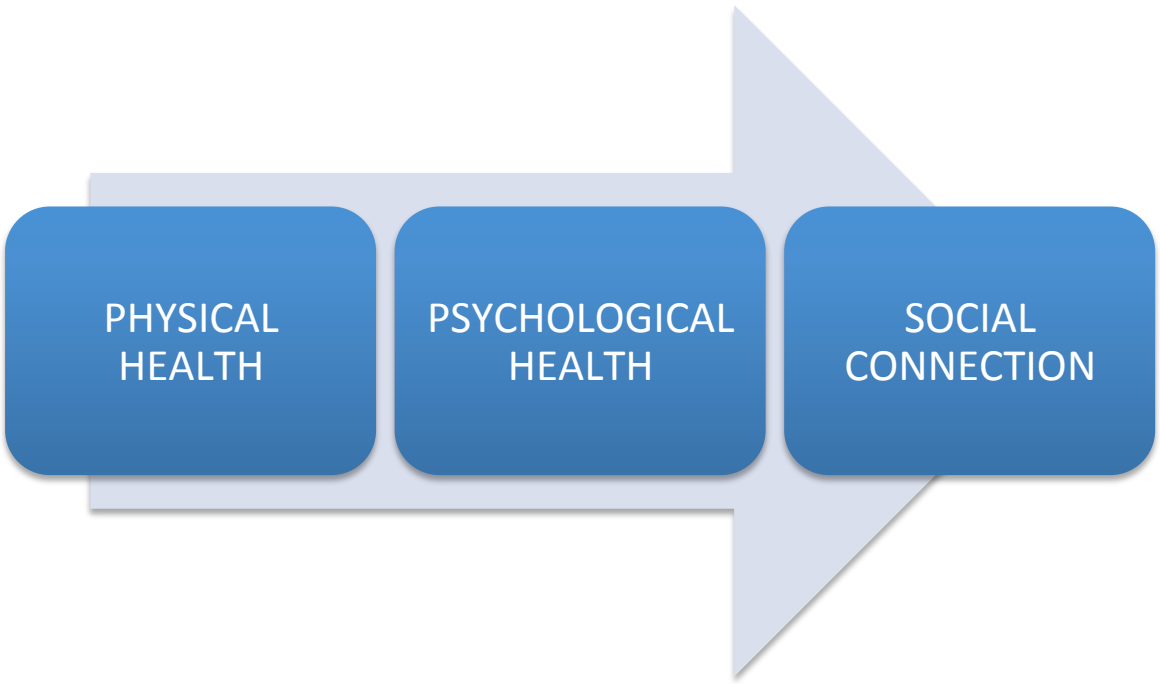
CHAPTER 1

What is Well-being and Why Is It So Important?

Each of us is well aware of how important our health and well-being is to our overall quality of life. Most people recognise that being healthy is a profound gift in life – without our health our lives would be severely diminished.
However, a fundamental aspect of our health is our overall well-being. While the word well-being may at first appear to be something new, most of us would recognise that our health, happiness, and ability to enjoy life are profoundly influenced by our psychological health and well-being. We know that when we feel good about life, and think positively about ourselves and the situations which we find ourselves in, that we are more likely to have greater strength and resources within ourselves; perform better at work; have stronger relationships with our family, friends and colleagues; and are less likely to engage in self-destructive behaviour.

What is well-being?
Well-being is a uniquely personal experience. Most of us will have experienced those times when we feel fully engaged with the various aspects of our lives, be it work, family, home, community, sport or whatever. We may experience particular periods in our lives when we seem to have an 'energy' which sustained us and enabled us to enjoy life. This energy is not related to being young, but is something that we can see in people at different stages of life.
Well-being is nothing new – but what is new is that it has been studied and researched for a number of years. This research has sought to answer the question as to how, even in the most difficult of circumstances, people can thrive and grow and find meaning. It has equally sought to answer the question as to why, even with wealth, opportunity and resources, sometimes people can feel unhappy, resentful, isolated, and experience a wide range of psychological issues.
Now the research is starting to produce some results. It shows that our well-being is determined by a number of factors that are both within us and come from those around us. It shows that well-being is something that we can work on – that it is not just innate; that with application we can make it stronger. And, fundamentally, the research indicates that those with a stronger sense of well-being will experience fewer health issues, will have better relationships both within and outside the work-place, and will experience a better quality of life regardless of the material circumstances in which they find themselves.

Sustaining our well-being
Our sense of well-being is primarily derived from both our physical and psychological states, along with the relationships we have with the people around us, be they our family, our network of friends, or our colleagues at work.



Exploring each of these aspects of well-being in more detail.

Physical health
This will not be a lecture on how to live a healthy life – most people are aware by now of the things they need to do to be physically healthy (stop smoking, drink and eat in moderation, get regular exercise).
Nor is it an attempt to negate the fact that many people who have a physical illness can be the most psychologically healthy. Each of us will be aware of people who have the most chronic, debilitating, physical illness yet they have an attitude to life which puts the healthiest of us to shame.
What it does encourage us to do is to consider that how we live our physical life can be both a reflection and determinant of our psychological health and well-being.

1. How we treat our body as a reflection and determinant of our well-being
Most of us have a sense of our own body. We know those times when we feel good in our body and will know when things aren't quite right. We will know when we are treating our body right and taking good care of it. Likewise, we know when we are abusing it and treating it badly, either by not taking good care of it, or abusing it by pushing it too hard, never thinking that it needs time to recover, heal and repair itself.
We are all aware of those times when we:

eat, even though we know we are not hungry
choose a sugar drink over water to quench our thirst
use alcohol to lift our mood, or to help us forget, or to make us feel better
lack the energy to do physical work, and keep putting off doing the garden, or the house painting
punish our body by continually expecting it to perform and not giving it a chance to rest and recover

We only have one body and we need to take care of it.
Each of us has a sense of knowing what is right for us.
Our body is a reflection of what we think of, and how we feel about, ourselves.

2. Our psychological well-being

There are many chapters that could be written on psychological well-being. However, let's focus on the key factors that have been shown to play a critical role when it comes to ensuring that we maintain our psychological health and well-being.

There are numerous ways in which we can approach the issue of psychological health, and there is a strong degree of agreement of over-lap between them. Research clearly shows that the following factors are fundamental to a person having a healthy and positive sense of self. Each of the factors is outlined in the model below, and before we look at them in more detail it is important to realise that (1) they are deeply influenced by our social, family and work environments, and (2) they are an ongoing process – something we can work on and learn from and adapt and develop throughout our lives.

How do we build our well-being?

How do I enhance my well-being at work?

3. Our sense of connection – family, crew and community

While our well-being is a hugely personal and subjective experience, it is incredibly influenced and impacted by the people around us. On an almost daily basis each of us will have experiences whereby our mood can be affected for better or worse by the people we come in contact with. We can remember times when our feelings have been hurt or our spirits lifted by virtue of what someone said or did to us. Each of us will be eager to spend time with those people who we feel good to be around, seeking to avoid those who we feel we have little or nothing in common with. And hopefully each of us will have experiences of love in our life, secure in the knowledge that there are people who care deeply about us, as well as those who we care for.

In the work-place we know how important good working relationships are. We want to work with people who first of all see and value what we do. Recognition of our contribution to life and work is a hugely important issue.

CHAPTER 2

Managing Stress

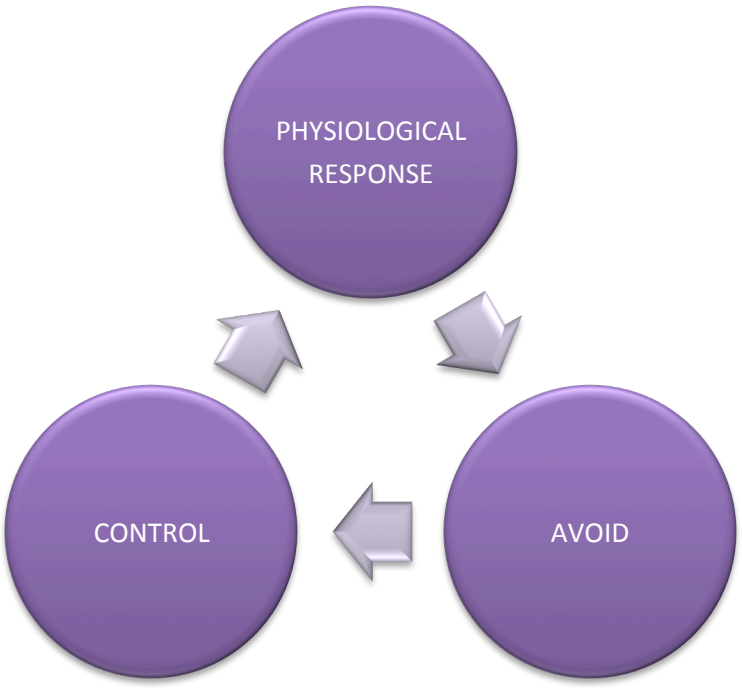
Over the past few years there has been a great deal of attention paid to the issue of stress. The word stress has become synonymous with the pressures we experience in life. The word is used as an explanation to account for every aspect of our day-to-day living - be it the drive to work, the demands to have the perfect home, or the relationships we have with our colleagues.
In order to deal with stress we first and foremost have to understand what exactly *it is*. We need to leave our common sense understanding of the word behind, and explore more deeply what it is, in order to come to appreciate the positive and negative role it plays in our lives.

Stress – our body's reaction to a perceived threat
Essentially stress is the mechanism our body uses to help us deal with short-term threats to our physical safety.
Stress involves <u>both</u> our body and our mind. First and foremost, stress is a physiological reaction within our body. It is a system which is designed to help us to survive. It emerges from a time in our evolution when we needed to have speed, strength, and quick decision making skills in order to deal with the threats to our lives.
Imagine you are pre-historic man. Your survival as an individual and as a species is largely dependent upon your ability to survive the threats to your existence which are in the world. These threats such as wild animals and enemies tend to be large, immediate and short-term.
Nature has, however, equipped you with a means to help you survive these threats. Once you perceive a threat, your body will immediately and automatically respond to the threat by releasing a number of hormones into your system which are designed to give you strength, to increase your speed, and to focus your thinking on finding the best solution to ensure your safety. These hormones (adrenalin and cortical) are known as the stress hormones. Their purpose is to help your body react immediately to the threats they see, in order to aid your survival.
It therefore helps to understand that the stress response is a physiological response, designed for the positive purpose of helping our survival. If it is so good, why do we talk about stress as if it is something negative, something which can damage us?
In answering this question we need to recognise that the nature of the threats (the stressors) we experience in day-to-day living have changed significantly. The short-term threats have become few and far between. We are no longer faced with the prospect of immediate threat of attack from wild animals. The threats to our existence can be more long-term than immediate, more subtle than obvious, and we may feel less capable of controlling or dealing with them because the means for resolving them are not always within our grasp.

Why the physiology of stress can be a problem
Our stress responses were shaped to help us deal with problems which lasted seconds – not for problems which last months or years. However, the threats we face in our modern world do tend to be more long-term in nature, lasting days, weeks, months or years. Our stress system is not designed to deal with that. Having small doses of the stress hormone in our system for too long a period can be harmful. These small doses can accumulate into larger doses causing problems for our immune system thereby making us more prone to illness, and, for our cardiovascular system increasing the probability of heart attacks and strokes.

The psychology of stress
A great deal of the research on the stress response has shown that while the physiological arousal is an essential component, it additionally involves two other psychological components in order for the stress response to become a problem for us.

The first important psychological factor is the extent to which we can avoid the threat that we face. Ask yourself the question: "if I had the option of avoiding this situation entirely, or could minimise the severity of the situation, would I take that option?" If we believe that we have no choices in a situation, or that we do not have the resources or capacity to deal with the demands which are being made of us, then there is an increased likelihood that we will experience the situation as stressful.
The other important psychological factor is the extent to which we can control the threat that we face in our environment. If we believe we are powerless to deal with the threat, that it is something we judge we have little or no control over, and that we really can't do anything to change the outcome, we are much more likely to feel helpless to do anything about the threat.



Stress is not necessarily a bad thing – it can help us perform well at times when we need it most, but it requires us to manage it. If there are aspects of our environment which cause us to be continually stressed, then it is essential we take steps to deal with those stressors.

How do I know if I am stressed?
One of the difficulties with the word stress is that it has become so prevalent and common in day-to-day life that it has lost its real meaning. It is commonplace for people to refer to any experience of pressure, frustration or annoyance as being stress, when in actual fact stress is a much more profound physical and psychological experience.
While the signs of stress will change from person to person, some of the more important indicators of stress include:

PHYSICAL	**TICK**
Diet – changes in our eating pattern, loss of interest in eating, eating too much, feeling nauseous at times	
Sleep – changes in our usual sleeping pattern, finding it difficult to go to sleep, waking during the night and finding it difficult to go back to sleep, not feeling any benefit from sleep, still being tired in the morning	
Exercise – not getting any exercise, too tired to engage in normal physical activity	
Sex – loss of interest in sex, the loss of sexual drive, absorbed with pornography	
Illness – feeling physically unwell	
BEHAVIOUR	
Drinking – increasing our alcohol intake	
Smoking – smoking more than normal	
Gambling – increase in gambling behaviour, accumulating gambling debts	
On-line – spending more time on-line	
Arguing – being easily irritated, being aggressive or argumentative with family, friends and colleagues	
EMOTIONAL	
Changes in mood – feeling sad, irritable, unable to cope	
Fear – feeling fear or dread; being anxious about a particular situation	
Isolation – feeling that no one but you can deal with the situation, unwilling to talk to friends, family or colleagues	
Experiencing panic or anxiety attacks	
THINKING	
Thinking – continually thinking about the 'problem', thinking of 'worst case scenarios'	
Concentration – finding it difficult to concentrate on what's at hand	
Ruminating – thinking the situation over and over in your mind	
Negative 'self-talk' about you and the situation you face, thinking the situation is hopeless and you can't cope with it.	

Each of us experiences some of the above at difficult or complex moments in our lives – they are part and parcel of being human. However, they become a problem when they interfere with our quality of life – when we no longer feel we can handle the day-to-day challenges in life. In those situations there are things we can do to manage and deal with the stress which we are experiencing.

Managing Stress

There are two key elements that we can address in dealing with our stress:

What is it that's causing our stress? In other words, what are the stressors or factors within our personal or work environment which we are finding particularly stressful

How can our physical and psychological ability to respond to and deal with our experiences of stress be made use of?

The following will enable us to look at each of these in more detail.

Identify the 'stressors'

A stressor can be any aspect of our lives which prompts the stress response. It can be the major events that we experience in life – such as bereavement, separation, divorce, getting married, changing jobs etc. A stressor can equally be an accumulation of smaller or more common aspects of life that, when combined, may cause us to feel challenged or overwhelmed by the situations we face.

Ask yourself – what is it that is causing my stress?

The first step when seeking to deal with any stress in our lives is to identify it. Ask what exactly it is in your world that is causing you stress. Pin the source of the stress down in your own mind. There can be many different reasons as to why we feel stressed but once we clarify those reasons we may be in a position to do something about it.

Ask yourself – is this something that is within or outside of my control to change?

Some of the stressors within our lives are within our capacity to change. Once we've dealt with the cause of our stress we will feel better. For example, imagine that the source of our stress is the mountain of bills we have to pay. Maybe there are steps we can take with regard to our budgeting and expenditure which will help us gain control of the problem. Even the fact that we are making efforts to consistently manage our budget will make us feel that bit more in control of ourselves and the situation – that we are not powerless to act in the face of the problem that we are experiencing.

Other sources of stress in our lives may be outside of our control to change, in which case the only way we have of dealing with the problem is to change how we think about it. We have to acknowledge that this problem is a part of our lives at the moment and even with the best will in the world, it is beyond our control to fix. However, just because we can't fix it doesn't mean that the situation is hopeless.

Build your resources and support system

Our capacity to deal with stress is directly related to our own internal resources as well as the amount of external support we can rely on.

There is no doubt about it that attending to our own health and well-being during a time of stress is hugely important. The research consistently shows that people who are physically fit and well, and who take regular exercise have a greater resilience in dealing with stressful demands and have more confidence in their own ability to overcome their problems. The positive chemicals which doing exercise actually releases into our system, help us to feel better about ourselves and enable us to shift many of the negative thoughts we can have, both about ourselves and our problems.

Likewise, having supportive friends and family we can depend on are essential in helping us deal with the stressors in life. They are a vital resource. Being able to talk with people we can trust will sustain us through any stressful period. Often we may feel reluctant to share our difficulties with others, as we may not wish to burden our own problems on them. However, having such conversations

can be helpful in two ways. Firstly, there's a difference when we say things out loud. It's no longer just ideas in our head, but rather is a story that we are relating to the world (often for the first time). Saying things out loud, and hearing others feed it back to us, can often change both how we think and how we feel about a problem. It can make it seem that bit better - not as bad as it was when we were thinking about it in our own heads. Secondly, saying what is bothering us and getting some genuine concern and sympathy will make us feel more supported. We are no longer alone in the situation – there is now someone else there, committed to sustaining you. And there are times when we all need to be sustained by those who care for us.

Exercise

While the research on the connection between mind and body is continually evolving, time and time again it has shown that one of the most powerful ways of sustaining our mental health is through engaging in physical exercise and activity. Maintaining your physical fitness increases your capacity to deal with many psychological demands.

Become absorbed in another interest/activity

Having interests outside the workplace keeps our psychological well-being in balance. Being actively engaged in other interests helps us maintain a sense of purpose, balance and perspective.

Talk with trusted colleagues

Our friendships at work are some of the most significant relationships that we will develop throughout our lives. It is essential that we invest the time and effort to develop strong friendships at work. I deliberately use the word invest, because those friendships will pay dividends. Friends sustain us through both the small and not-so-small difficulties and problems we encounter in life.

There is a culture of story-telling within the Fire Service. If you're having a problem, take time to talk it through with a trusted colleague.

Positive self-talk

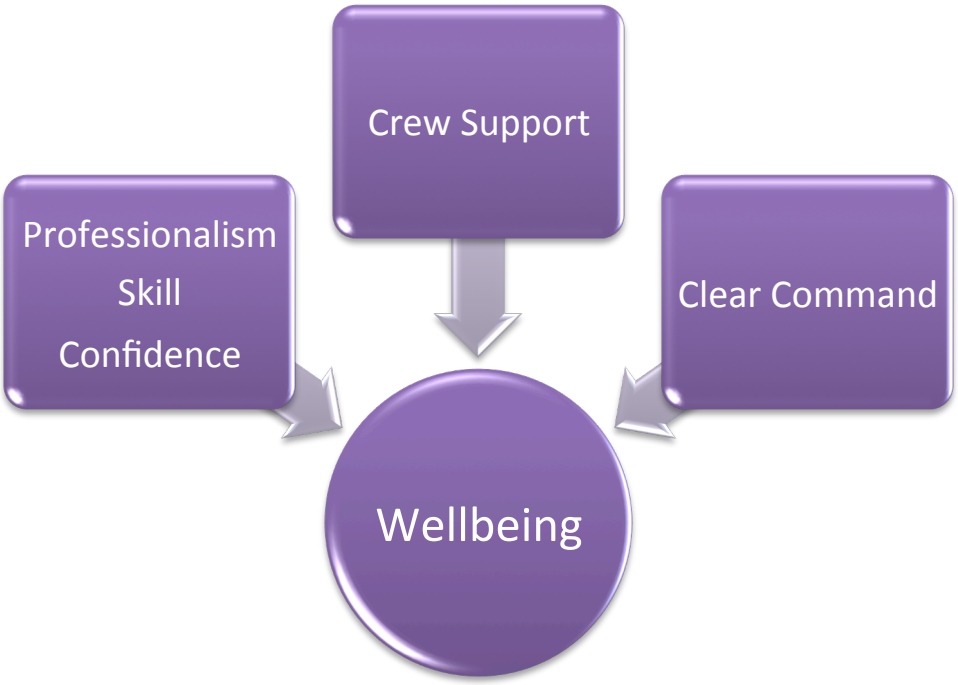
'Self-talk' refers to that little voice inside our head that narrates our thoughts on an ongoing basis. It's your own voice, and what it says dictates how we think and how we behave.

While we can never switch the 'self-talk' off we can change the script and the volume. Simple changes like substituting even one word for another can have a profound impact on how we behave and work.

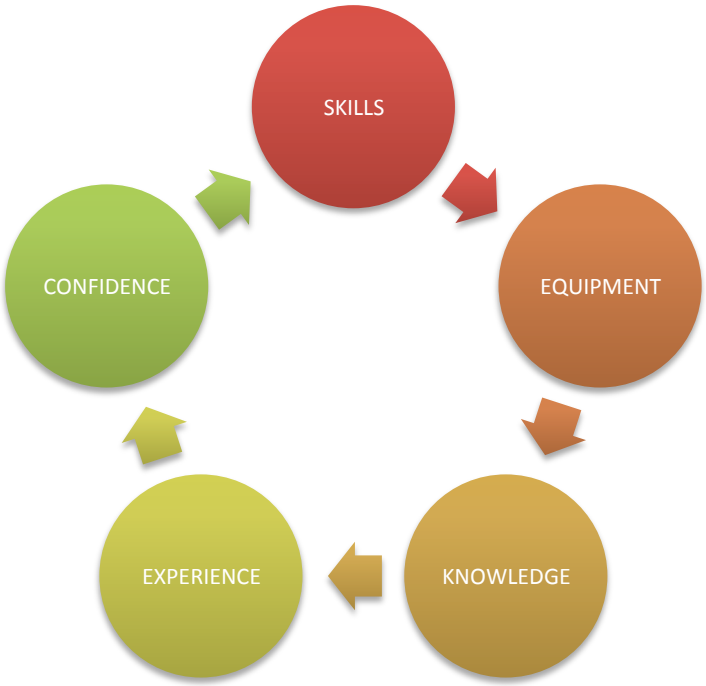
Maintaining the Well-being Of Fire Crews

This resource guide has been developed specifically to support the well-being of individual firefighters and the crews and Fire Services which they work with.
So what are the factors, when looking at the work of a fire crew, which best sustain the well-being of its members, and how can these factors be built into the day-to-day functioning of the crew.
To answer this question it is important to look at it from a number of different angles. First and foremost it is essential to understand the nature of the work they do - to identify the key factors which underpin well-being within their work; and to ensure that there are systems and processes in place which prioritise factors of well-being as having as great a significance as performance.

Sustaining the well-being of firefighters
For the past six years the author has worked closely with a number of different fire crews in identifying the key factors which sustain the well-being of crew members. As to be expected, some of the factors were to do with the individual, others to do with the level of interaction and support within the crew, and some were related to the level of support provided by local and service command.



1. Professionalism, skill and confidence
Having done extensive research with fire crews over the past number of years, it has become apparent that the most significant source of support available for dealing with particularly difficult emergencies, is their own professionalism as firefighters.
A firefighter is primarily there to help –they are trained and practiced in making a bad situation better. In order to do that they are primarily reliant on their skills, knowledge, expertise, judgement and equipment to enable them to do the best job they can possibly do.



2. Mutual support

Just as no one individual firefighter can undertake an effective rescue on their own, likewise, how an individual responds to an incident can be profoundly affected by the level of mutual support which exists between crew members.

As most Firefighters will be aware, mutual support is essential for an effective crew. If there is an absence of trust and confidence in each other, it will affect the crew's morale and performance.

A lack of mutual support will lead to increased hostility, lack of a willingness to 'lend a hand', and generate a culture of verbal banter designed to undermine, ridicule or challenge an individual. These behaviours start a downward spiral of morale within the crew. An individual is not going to seek mutual support from a colleague where such a culture exists.

The positive aspect of mutual support and respect within a crew is that it can be an enormous resource to any individual in helping them deal with a difficult situation. Behaviours like:

acknowledging the work of others and the crew as a whole
telling people that they did a good job
asking them how they are doing
sharing own reactions to a call-out
talking about other similar incidents
offering to help with a particular job

These behaviours build respect, trust and mutual support between each of the crew members. This mutual support is a resource or 'capital' that can be drawn on when faced with particularly difficult call-outs. It is when a crew is tested by a particularly challenging call out that the quality of relationships between a crew will sustain them through that difficulty.

A belief and confidence in the ability of the crew and the individual to competently deal with any particular incident is a key element in both preparing and sustaining each person's psychological well-being.

That confidence comes from two sources. Firstly, each individual crew member must have the self-belief that they have the skills, training and equipment to deal with the task which they are required to perform. That self-belief comes from maturity and experience.

3. Clear command

However, an equally important part of that confidence comes from the confidence that is generated by those who are making the decisions and trying to get the situation under control.

An important part of a sense of safety comes from the belief that no matter what situation the fire crew finds themselves in, there is a plan to find a way through it. Within the context of a fire crew, this responsibility rests with the Commanding Officer.

Well-being after a 'shout'

One of the most unique aspects of the work of a firefighter is that it brings them directly into the middle of a variety of emergency and crisis situations. The firefighter has a key role in making the situation better. The public rely on the Fire Service acting and making decisions, using their equipment, skills, competence and judgement to make situations less critical.

Some of the situations that firefighters encounter can be incredibly difficult and challenging, being asked to deal with situations where people are at their most vulnerable and maybe at tragic points in their lives. People may have died or have lost a loved one. Some of the situations may even involve people known personally to the firefighter.

In some situations people may be encountered who are frantic with panic and grief, and for whom this moment is the single most defining tragedy in their lives. People can be dealt a blow that may take them years to recover from. All their possessions may be lost in a fire or by flooding, and while many objects can be replaced, their actual loss may have more to do with the sense of security, family and place that these possessions provided.

There is no doubt that a human being could not remain unaffected by the sadness and distress which can be a part of some emergency situations. Firefighters too are human, with their own personal lives and concerns. It's easy to find a link as to how a firefighter, whose own child is terminally ill, would be affected by a 'shout' involving a child being injured or killed. No one switches off fully between their personal and their work life.

While each firefighter strives to be professional in their role, such professionalism does not mean that they will not be moved or affected by some of the tragic and gruesome situations they encounter.

The issue of well-being for a professional fire crew is therefore significant on two levels. Firstly, how can the crew ensure that their individual and collective well-being is maintained so that they can perform effectively in the middle of even the most distressing of emergencies? Secondly, but equally important is, how can the crew ensure that no individual is overwhelmed by the tragedy that they have witnessed, and indeed come to share, as the responders to an emergency?

The incident as a professional challenge

Effective individual and crew performance is one of the key factors which underpin the thoughts, feelings, and reactions of the crew in the aftermath of each emergency that they respond to.

Emergencies can be a pressurised situation – decisions need to be made quickly, and there are huge time constraints which directly affect the success or otherwise of the

outcome. Individuals need to work skillfully, while the crew need to work cohesively as a whole. Frustrations and tensions may be high. All this is added to by the stress hormones in our system, which can drive people to superlative performance but equally cause us to make the simplest of mistakes, to be impatient, or even to be afraid.
The following are a number of tips, techniques and strategies which have been used by firefighters to help sustain themselves through emergency responses.

Stay 'in role'

One of the key findings to emerge from research over the past few years is that firefighters perceive and construct the shout in unique ways. First and foremost the incident is looked at in terms of being an opportunity to do their job – to exercise their professionalism. The shout is a challenge, and the crew is there to do as effective a job as possible. It is an opportunity to put their skills and abilities to meaningful use, to do the job that they signed up to do.
In terms of protecting the well-being of firefighters, the key learning that has emerged from this understanding is that by focusing on the challenge of the emergency that they are dealing with, they are less likely to become absorbed by the 'tragedy' of the situation. By maintaining a professional distance, which is a common practice for most medical professionals, firefighters can both protect themselves and perform more effectively during the course of an emergency response.

Participate in the 'hot debrief'

It is essential therefore that after each incident time is taken to process what we thought about our own, and the crew's, performance. The 'hot debrief' provides an ideal forum to allow us both to learn from and debrief each other. If people participate openly and supportively, it contributes to a greater level of confidence in the capacity of individuals, and the crew as a whole, to continually learn from each incident and each other.
This reflection should however not just focus on the technical aspects of the emergency response, but equally should allow time for the crew to reflect on and absorb their own reactions to the incident. It can be achieved by the crew asking themselves:

How do we think that this emergency occurred in the first place?
Is the casualty known to any member of the crew? If so, what are the circumstances of the family?
What does each member think was the worst part of the whole situation for themselves?
What aspect of their performance are they most proud of?

If they believe that their individual and collective performance was done to the best of their ability, that they could not have performed any better given the circumstances, then they are more likely to be satisfied with the outcome of the incident, no matter how challenging, gruesome or tragic it may have been.
If, however, a firefighter believes that either their own performance, or that of the crew itself, was not up to the standard that they would be expected to perform at, then it can negatively impact on the ongoing performance, well-being and cohesion of the crew.
Such thoughts and beliefs about performance need to be aired and made clear early on. If left unattended, there exists the possibility that they might further undermine subsequent individual performance; leave an individual feeling

isolated and unsure; and contribute to creating an air of mistrust among the wider crew. In addition, the individual and the crew miss an opportunity to learn from any mistakes or errors. There are a number of ways, outlined below, in which such situations can be dealt with.

Talk with a commanding officer / fellow crew member
One of the most profound and important sources of support that we can receive is from colleagues. They will probably have experienced similar situations and issues of concern. A trusted colleague can reassure, coach, and help clarify your own thoughts about any concerns you may have. Talk with a colleague – ask for their help – it will strengthen the relationship between you. While this would apply to any colleague it is particularly apt in instances where new recruits have joined the service or where there has been a significant change in the personal life of a colleague (e.g. a bereavement, relationship breakup, personal or family illness).

Attend to important basic needs
Basic needs should never be overlooked in attending to well-being. These include:

Food – having a few sweets, mints or chocolate will help sustain sugar levels. Having a meal after an extended incident is important as crew members will be hungry and it is important to eat; equally it provides a great opportunity for the crew to debrief in a supportive environment
Drink – having ample water to drink during a response is important for physical sustenance. Having a cup of tea and a few biscuits after an incident, as a crew, is an important means of boosting a crew's physical and psychological health and well-being.
Shower – everyone knows the physical benefits of having a warm shower – well there's also a psychological benefit. It can help us to mentally transition from the sphere and concerns of work back into our own personal and private world. It equally ensures that we're not bringing the physical residue and smell of the workplace into your home.

Participate in 'Psychological First Aid' initiatives
One of the key aspects of an effective crew is the ability to work safely. Working safely means ensuring that each person takes appropriate steps to safeguard the physical and psychological health and well-being of each crew member and colleague, both when out at 'shouts' and when back at the station. Each of the processes outlined so far in this resource guide has highlighted the day-to-day things that can be done to protect both physical and psychological health and well-being. However, there may be times when it is appropriate to supplement those processes by bringing in someone who will help firefighters recognise that there may be parts of ones psychological well-being which need further attending to, and who is in a position to provide such help and support. These 'Psychological First Aid' initiatives come in a variety of formats – to suit the 'not one size fits all' situations. Typically, these discussions can consist of one of the following:

a brief educational discussion on its own, looking at how best to support psychological well-being
working through some ‘psychological first aid’ techniques to help deal with any immediate anxiety and distress
opening up a deeper discussion where thoughts and reactions can be shared
meeting with crew members individually after a discussion
creating links back to an EAP (Employee Assistance Programme) by providing information on where further, confidential support is available to participants

No matter what format is chosen the objective remains the same – to ensure that the psychological health and well-being of each member of the crew is protected.

The tragedy of an incident on a personal human level

Many of the incidents that fire crews respond to are significant human tragedies for the everyone involved – casualties, family, friends, bystanders, as well as firefighters.

As participants in the rescue operations, the firefighter witnesses tragedy first hand. You may witness the physical devastation to homes, property and communities. You may witness the tragedy of a young person who has taken their own life, and seen the total pain and loss of those left to mourn.

It is perfectly understandable that individuals and crews will be touched by the tragic situations they will encounter. It is important to take a realistic approach to the variety of responses people can experience and share.

The predominant responses receiving the most attention within the Fire Services have tended to fluctuate between two extremes. On the one hand, any form of emotional response displayed by a man has been seen as ‘unmanly’ or inappropriate. There has tended to be a sense that firefighters must be immune from the tragedy they encounter – to display any form of emotion is a sign of weakness. At the other extreme has been the tendency to view every incident as a potential source of ‘trauma’; that firefighters are particularly vulnerable to being traumatised by virtue of the work that they do, and as such need to express their thoughts and feelings after each incident in order to protect them from developing any further adverse psychological reactions.

As is the case with all extremes, neither accurately reflects the truth of the situation. What is needed is a middle ground - a recognition that firefighters are human and are going to have a variety of personal responses to the incidents which they encounter, and that therefore it is crucial to create a space within the Fire Service to acknowledge that reality. Equally it needs to be acknowledged that firefighters are capable of dealing with the most tragic of situations without asking people to publicly express their thoughts, reactions and feelings in the hope that it will prevent further psychological illness.

Our reactions are never fully our own, but can be profoundly influenced by the people around us. We might think that we need to keep our feelings to ourselves, lest they be misunderstood by others. There may be times when we think that our reactions are different from others, and that there must be something wrong because of that. On occasions we wonder why we’ve not had a reaction in a particular situation –have we become so used to dealing with such incidents that they no longer affect us as they did in the past? Each of these situations highlights just how unique our reactions can be. There is no ‘ideal’ or ‘typical’ reaction – each is a personal response, and as such is equally valid.

However, a problem can arise when our reactions are impacting on our day-to-day functioning. If you find yourself:

tending to avoid similar situations
or experience physical symptoms such as sweating, difficulty breathing, or anxiety/panic attacks when we encounter a similar situation
thinking a great deal about the situation, having 'pictures' or 'images' of the situation which interrupt your normal thinking pattern
having difficulty sleeping or eating
being irritable, angry and frustrated over day-to-day things.

If any of these responses are impacting on your quality of life, then it is important that you talk to a professional such as the EAP service or your family doctor. While these responses will usually pass within a few weeks, it is important during this period that you are getting appropriate psychological help and support. There are techniques available which will help reduce the impact of these responses.

VOICES
It is important to acknowledge a number of key points with regard to our psychological reaction to incidents:

1. each individual's reaction to an emergency is different and unique. There is no doubt about the fact that each member of a fire crew will have a different reaction to the same incident.
2. our response can be influenced as much by our own feelings on the day as by the actual incident itself.
3. our reactions are not a sign that there is something wrong with us – it is just the mind and the body dealing with an abnormal situation.
4. some reactions, while on the surface may appear inappropriate, may actually be an entirely appropriate form of coping. It is perfectly acceptable not to be bothered or upset by an incident which others have found difficult or challenging. Likewise, the use of 'black humour' in the middle of a tragic situation can have a positive effect on individual and crew morale. We just need to be conscious that other people may experience the situation differently from us and therefore due consideration for their feelings needs to be exercised.

However, while each individual's response is unique, there are processes which we can utilise both as crew and as Fire Fighters which will help ensure that we are at peak personal performance when responding to any emergency.

CHAPTER 4

Professional Support and Resources

The focus of this resource guide has been to draw attention to ways and means that can be used, on a day-to-day basis, to sustain well-being both at work and in our personal lives.
In addition to the support which we can give each other, and the actions which each of us can take to enhance our well-being, there are professional resources available to each individual firefighter, to help them deal with any aspect of their personal or work life which is negatively impacting on their well-being.
There can be differences between men and women in the ways they deal with their health and well-being. Women tend to talk more openly with their family and friends about issues or problems they may be experiencing. They can have a well-developed set of words to describe how they feel and what they believe to be their problem. Equally, there can be greater social support available to them, as they have worked harder at developing relationships in their lives. They are also more open to seeking professional help.
For men, the reality may be much different. They are more likely not to talk about their problems with other men or women. Men tend to have fewer meaningful social relationships, and even then may be reluctant to disclose any problems that are impacting on their health and well-being. Often among men, there is a general reluctance to seek the help of professionals. This can be a result of:

not being willing to admit that there is a problem
not even recognising that there is a problem in the first place
believing we can deal with every problem on our own
fear of disclosing aspects of ourselves that we may not have discussed with anyone else ever

When to seek help
There can be some early indicators that suggest when it is appropriate to seek help from a professional in dealing with well-being. Typically, such indicators can include:

Basic functioning

Am I eating normally?
Am I sleeping more or less than usual?
Am I attending to my personal hygiene – washing, hair cut?
Am I attending to my appearance – clean clothes?

Has my behaviour changed?

Has my alcohol intake increased?
Am I smoking more than I usually do?
Has my energy level gone down?
Do I feel tired all the time?
Do I engage in my usual hobbies?
Has my exercise changed?

Has my mood changed?

Do I think that my mood has changed?

Am I more irritable and angry?

Do I become easily frustrated?

Have I lost interest in my work/family/social activities?

Thinking

Am I continually thinking about a particular problem or issue?

Do I find it difficult to 'switch off' from my thoughts?

Do I find it hard to settle and concentrate?

Am I easily distracted?

Relationships with people

Are my friends and family concerned about me?

Am I avoiding people?

Do I find it difficult to have a conversation with family and colleagues?

Am I becoming easily frustrated with people?

Am I more irritable and angry with the people around me?

Do I become easily frustrated?

Have I lost interest in my work/family/social activities?

At the end of the day the most important thing is that if you have any concern about your health and well-being, it is critically important that you get medical and psychological help. Your Doctor will be able to check you out physically, while talking with the EAP Service will ensure that you get the most appropriate psychological help.

IT'S GOOD TO TALK

The notion of talking about our problems is not completely alien to men. How and where we talk about them can be very different from that of women. Recent studies show that men tend to talk more comfortably when:

They are involved in a task

Men tend to be more open and freer talking when they are engaged in some activity – making, doing, building or competing.
The activity itself both creates a conducive environment, as well as remaining the focus or purpose of engaging.
All it needs is that we ask the right questions, show a genuine non-judgemental interest in what the other person is saying, and respectfully offer any support that we are able to.

Reciprocity

The ability to be in a position to offer mutual support appears to be important to men.
Men will ask for help from others if there is likely to be an opportunity for them to reciprocate or 'pay it back' at some future time.
There is the need for a degree of balance and equality in the relationship - that I am more likely to ask for help if I believe I can pay it back at some future time and will not be indebted to the person that I am seeking help from.

Talking with the EAP Service

Many City Councils have a fully professional EAP (Employee Assistance Programme) service, which is available to all members of the Fire Service. It is possible to speak either over the phone or face to face with a professionally qualified Counsellor or Psychologist. The service is there to help deal with any aspect of psychological health which is of concern to you.

How it works

Ring the Council EAP Line which is available 24/7.

Talk with the EAP Counsellor – he or she will seek to understand the particular issue or problem which is of concern and will put in place the most appropriate counselling programme to help you address the problem.

The EAP is a confidential, professional service. Your contact with the service is just between you and the EAP service.
It can provide you with a range of psychological supports and interventions to help deal with any aspect of your personal, family or work life that is impacting on your well-being. The range of problems it can deal with include:

Anxiety	Bereavement
Bullying, harassment & sexual harassment	Coping with stress
Depression	Relationship or marital difficulties
Family or parenting problems	Handling conflict
Health problems	Suicide
Sexuality	Financial & legal difficulties

APPENDIX 13

FIRE FIGHTERS DISCUSSION GROUP

TRANSCRIPT 1

Facilitator (F): Genuinely, you're all very welcome and I would like to thank you for coming along and giving me your time here this evening. As I was saying I suppose what I want to explore primarily are your own experiences of incidents, how you deal with them on a personal level and as a crew. Before I get into all that can I throw a general question out, but if you were me here to-night and conducting this sort of research are there any particular questions which you believe I should be asking, or I need to ask.

P47: I suppose the biggest thing even about…like I've been through both systems, the old way where it was just a thing of like have a cup of coffee after an incident and my own view of this thing is that this is an improvement on the way it was done before. But I think a lot of Fire Fighters still have this confidentiality or whatever, they're not sure whether it is the way to go. I myself I think it is the way to go, but I think a lot of people in the service need to be convinced that this is for their benefit rather than just someone or the Sub-Officer, bringing in the crew to meet A. or whatever.

F: Is it you think that people need to be convinced that…

P47: That it's kind of for their benefit you know. I still feel that out there it's still…the old way is still kind of ruling the roost as such. "Be a fucking man and stand up". That is the way it was supposed to happen and it will take a long time to change that. That's my view of the thing, but everyone wouldn't have the same view. But I think it's one of the things that should be addressed that it should be…kind of put out there more and advertised more in stations, and maybe they should meet A. or yourself more often or something. Like they started off the peer-support thing, everyone in a while they should meet or they should kind of…

P49: If I can make a comment there. I was all in favour of this…that after an incident we'd get someone like A. in to talk to us or whatever. But there was an

incident…when was the child…February, that there was a child died basically. And we organised one of these meetings, but it got into the paper, don't ask me how, I'm not saying where or how or whatever, but it appeared in front of the paper about the incident and that the crew of X. fire service were getting counselling. I think that was the way it was worded.

P52: It was worded that way yeah. In "The Examiner".

P53: But so what?

P49: No but, say from the point of view of confidentiality and everything I think that left a sour taste in my mouth. I didn't mind having counselling but having it in the front of the paper and …I would have regarded the station as accepting this, the stations are out there as A. was saying these fellows who are reluctant to go down that route. When they saw that I say they were saying "Jesus, all this thing about confidentiality is a load of shite".

P52: Fellows working with you were laughing at you. "You're stressed out boy, you should be at home to-day".

P49: Ok, so it's only a joke or whatever, but Jesus, it was an incident where a child died, the last thing you wanted…Jesus you couldn't handle that you had to get your hand held. I don't know it just left a sour taste.

F: Ok, and I'm going to push that one but if I could just hold it for a moment. Are there any other questions that we need to explore as well this evening?

P53: You mentioned that this seems to be an imported kind of American model, and from…my only experience would be through television, but in America when in group sessions in America they fly the flag and everybody speaks from…you know the party line. I don't know how I'm going to get into this here now, but A. was saying there are some old timers in Ireland who just don't subscribe to this. And in America it's not a problem, I think everybody in a fire crew would seem to go towards this because it's just more acceptable over there, but here we have more diverse personalities you know. And there certainly isn't a facility as has been

presented to us for an easy way for opting out. You're stigmatised if you opt out of this system. And then the six that go for the meeting, the seventh guy is out there and the six are out after him saying "on he must be freaking out and if he is hot going to crack up now then it's going to be next week". But that's not necessarily true. You know…it should be very gently put to somebody that they have this option of being in or out and I'm sure one of the sessions kind of deteriorated, in my view anyway, and I'm sure the people listening to me get a pain in their fucking head but some people got on another track when they were sharing about, what they were discussing about the previous incident. I don't know if I can make this point clear. The main one anyway is that you shouldn't feel obliged to come to these sessions if you're not ready. You could be first in the queue for a particular session, and not want to be at the next one, and the point I made at the two we had: one incident affected me fairly deep as far as my own standards are concerned, and the baby incident didn't touch me at all in any shape or form, for and I've been thinking about that since and I think I've worked it out in my head as to why. I'm not saying the people should be kind of…some incident get different people different ways, and you could be right next to a guy attending the same casualty and being vastly differently affected, you know. And the sessions aren't necessarily guaranteed to help at the time that they occur.

P50: Like the thing is that some people will be affected more than others. The very nature of a first responder is that they are going to have to deal with a person on a one to one whereas the rest of us might be just busying ourselves doing other things. Like if the person dies, the first responder would…

P48: They would have connected with them because they would have been speaking with them.

P50: Like they actually had hands on.

P51: But I mean it could easily affect the next fellow who was standing…

P53: For me a huge element of it is identification.

P47: But the way the service is going anyway is that everyone will be a first responder eventually, so that everyone will be…

P53: But if you're a parent and a child is killed or injured, that identification you have. If the casualty, if you are attending him as a first responder or not, if you are close up to the casualty, and he resembles your brother or she resembles your sister or your mother, that is going to have a vastly different effect on you. The diversity of effect you know, and there are times when you just don't want to go in to a group of lads whom you might not necessarily like, or some of whom you might not necessarily like, at that time. So the option to remain out shouldn't be a problem. But when you do you create a concern among your colleagues then. It's a complicated side of it, and you might want to stay out of one session and be rushing into the next one.

P47: Every incident has different effects on…

F: Can I ask a couple of questions? Do you think you would need a support service? Do incidents, or what is it about incidents that may impact on you?

P50: Well my opinion is that I think that it is, cause ok, it might only affect two or three of the group, but then again we are all in a crew and that does treat people that need it that they're supported. Like what K. is saying is that you might be in a situation where you don't need the counselling yourself, but I think that it's important say if there was an incident K. you thought nothing of it, I was distressed, but you should be there for the session, everyone should be there together. As a group we should be all together.

P52: I think K. is right, I mean if you don't feel like, you shouldn't be pressured into the group if you don't want to be in the group. Everybody deals with it separately. Like I believe that this is important, and it's something to fall back on. But sometimes you just mightn't want to…you might have your own way of dealing with it. You might want to deal with it your own way.

P53: Under no circumstances was I saying that the service shouldn't be there. It's quite the opposite. The service should definitely be there, and most emphatically on an individual basis the choice should be there for the individual, to take or leave the service as they want. I'm not taking from the group sessions that we've had. I'm for those as well, because they do help. Even if you don't like the sessions, of whatever,

it can have a kind of inverted affect on you, you can pick it up later. I honestly don't know what I'm saying other than there is a kind of perceived obligation to attend. It's a delicate matter. I don't know how you'd facilitate the person who didn't want to go and not stigmatise them. That's all I'm saying.

P48: But it's also where you have to go around the room and everybody has to say something. What is you don't really want to be. Cause I felt forced to say something, and I was just copying what someone else was saying.

P53: Spot on what I'm on about. And in fairness to D. at the last session he simply said look, I'd prefer not to talk about it. And that was quiet expected. But we should take that on as the norm.

P48: It didn't affect me as much, I really didn't have much to say on it. I didn't really want to talk about it. But you felt that you had to say something.

P53: Maybe if you could have a coming or going kind of situation. In this environment, in this room here now, we have a kind of a kettle out there, you could just go out for a tea if you didn't want to and you're not insulting your colleagues then by saying "I don't want anything to so with ye". Just a coming and going atmosphere in these meetings, maybe I don't know.

P48: The smokers would go out for a smoke.

F: For the time being can I ask you to forget about the critical incident service. Can I go back for the moment and ask what sort of incidents you deal with?

P49: From the very serious to the stupid, to be quiet honest. You have the whole spectrum. As I said you could be, go through an incident where someone dies in the morning and you could go through something that you don't have to get out of the truck in the evening. Like you have that range and everything in between.

P48: You wouldn't even have to get out of the station.

F: Are there particular aspects to incidents that would impact on you more than others.

P47: Probably road traffic accidents would be the biggest kind of incident that everyone has to be busy and everyone has to keep their head like as such. But I think that anything involving children kind of affects people. Again, you can never know incidents…no two incidents are the same, and just the nature of the job it shows that you could come across anything, from the bizarre to the funny to the life threatening and I think that everyone has their own way of dealing with it as such. But the service, I think, is there to be used, it's probably not used as much as it should because people deal with it in different ways. They deal with different incidents in different ways. And you can ask anyone like, two people attending any incident they'll have two different versions of the incident. So no two people are the same as such, so what group therapy might be great for some person, whereas individual therapy might be the thing that another person needs and you don't know. But the easiest way is for everyone to gather as a group and maybe that will bring out the…what's needed. Or people can sit there and listen and maybe it will help them by just listening. Which I would agree, trying to get everyone to say something probably isn't the road to go down. I think some people prefer to talk and some people just prefer to listen.

P51: Those lad it should be a case that you feel obliged to say something.

P49: I had a good idea.

P47: You had. One this year!

F: Do you find that incidents impact on ye?

P50: Some incidents might impact on you.

P48: The serious ones.

F: In what way would you say they impact on you?

P50: Speaking from my own experience I had an incident there where I was called from my other job and a young fellow who I knew, I wouldn't say very well, but I knew him from passing every day, he died on the scene and I couldn't do anything to save him. And I thought I was grand and we came back and had a cup of coffee with M. and A., and I was grand and I walked out of the station and I hadn't a clue where I was or what I was doing. And I went back to work and I was wrecked for days. I had everybody coming over and saying ring A. and talk to her, that's what she's there for. I didn't want to ring A. and I didn't want to talk to her. I wanted to talk to is like my wife. It's probably the way I was brought up you didn't talk about your feelings. "Shut up, we don't care what you feel." Probably it was just that. But I just found it easier - after a couple of days I was grand.

F: Good.

P47: I'd say every incident would impact on people. But again people being different personalities and everything they take different things out of it. Some people deal with…with…a small thing could affect them. Whereas someone standing long side of them would say, sure it's a mickey mouse thing you know. I mean it's very hard to say how an incident stays with you, only that every incident is different and some you'll remember for x thing and others you will have long forgotten because there was nothing actually stuck in your mind about the incident. And to try and say like how do incident affect you I don't think…you'd have to go particular incidents I would say and it wouldn't even at that the same person wouldn't have the same…thing out of that incident. I think everyone at an incident it affects them differently be it a small incident or a major incident.

P52: The one time I was affected by an incident, the only way I can describe it, it's not the right word, but the nearest feelings I had were guilt actually. And the way I appeased it was that I went to the funeral and I saw the boy in the coffin. And I don't know, that wasn't a strategy or anything it's just something I felt obliged to do. And I actually spoke to a policeman before I did that and I told him I had it in mind and I thought he was going to say I was fucking insane but he said he had been in similar situations and that he'd gone, and didn't declare himself or anything and it did him a power of good. And it just did it for me. But again, you want about the feeling. A kind of a guilt, I don't know, a what. That this person was dead and I wasn't or

something like that – bizarre. But like E. was saying that he went out the door and he didn't know if he was coming or going, certainly inexplicable stuff without any foundation, you know, there was no reason I should feel guilty or anything like that and that wasn't the right word. But there were the kind of emotions I was feeling, that this person was dead and I wasn't – kind of, something in that area anyway.

P51: I'd say now after the incident in C. I felt very guilty but it was more, I could have done more, even though I knew like, he had lost too much blood and even if we were in a hospital we weren't going to save him. It was still in my head like, you know, I should have done more I should have been able to do it. I'm trained in first aid like I should have been able to do something better but like, I couldn't. There was one way I knew I couldn't do it and another way, another part of myself saying but you should have tried you should have, even though I knew what I had with me I wasn't going to be able to do much, you know. And it was when I went to the funeral, a couple of days afterwards that seemed to get back to normal. It never goes, away, I still picture it every now and again, you know but it got back to normal. But I'd say the guilt was…he felt it a different way than I did…it's probably something that could be with everybody. I don't know. Somebody else talk now.

P47: The nature of the business is that you know…you don't know what to expect until you get there. Really you have to deal with it while the incident is going on. Some people kind of lock it away, and then the feeling you get like I'd say nearly everyone, and emergency personnel like, you always think you could have done more. If someone dies, could I have done this could I have done that, you question yourself like and I think that's at any incident, you question yourself, could I have done it this way, could I have done it better, could I have done this you know. I think that's in everyone one of us, we kind of question ourselves after anything stressful. Could I have done it better.

P53: Aside from A. and M. whose experiences, well they were Fire Men they were in the business before the rest of us got in, I think it should be said that our experiences of trauma of blood and gore are limited. We certainly haven't been tested to what we imaging we could be. We've had no…other than the child…we've had no burnings of bodies or anything like that. These guys probably have, but the rest of us haven't, you know a casualty suffering from acute burns must be an

awful…ah jasus I dread ever having to come on it. Because you just can't touch or that kind of thing. I imagine that can be fairly, and I'd imagine the screams and that kind of thing would get to you. Certainly road traffic accidents expose flesh and cut flesh and break bones and all that, we still have a long road to go before we are really tested, again aside from the two lads over there.

P48: But we were actually on the right road the way we did start here like, the meeting with A., kicking in early. And it's different from other stations like, where this came in to fellows there ten or twenty years like, and you know they had their set ways or whatever. You know we kind of got it from day one here, like, and you kind of just got into a bit a system of it, which it does help, it does help a lot like. I'd say you'd realise it was well like coming from another station but…

P51: I remember when I was starting off first I thought that, I was thinking how would I deal with these incidents. I didn't know would I be able to do it. But so far as K. said there like what were we at anything really, really, bad. But anything that we were at I can honestly say I wasn't affected that much. Like you go back to…we're all working as well in other jobs so you could have the situation that you could be dealing with someone who's dead at the side of the road at three o'clock in the morning and you have to get up and go to work at nine. Like you just have to get on with your life that way. But often, you go into work you'd be talking to the people saying I was at this last night and someone died and they'd be saying "Jesus I couldn't do that at all." Then you'd say to yourself like, someone has to do it. It's not a case of like, why can't I do it. And I think so far everybody here like they all seem to be able to…from what I see they're all able to handle themselves ok. But that's my opinion that I didn't see anybody yet who was stressed out about it.

P52: Who went off the deep end yet.

P48: I think it does get easier too as you go along like, and you know, probably the first one or two you come across are always going to be a bit hairy. But I think myself it does get that little bit easier to deal with as it goes on.

P49: That's the thing like, I know it's an awful thing to say but you have to be "blooded" before you can…

P53: And I think part of the reason we take the job in the first place is because we think anyway that we have a kind of a switch. It isn't callousness or anything, but I figure, if I'm ever up to anything, in front of my worst imaginable whatever, I think part of you would just switch off and do whatever needs to be done. What might happen afterwards might be another matter. We're not afraid but we're not hoping for anything bad to happen. But I don't think any of us would be anxious that we would run away or get so confused and frightened that we would apply the improper treatment to whatever casualty was there. That's what I'm kind of saying.

P51: Like as he said you don't want to go to an incident and someone's dead. Like if it's there you have to deal with it. The only…you deal with what's put in front of you. Like you don't go…and at the end of the day you go home and get on with your life.

F: And how do you tend to look after yourselves after an incident?

P51: At these very critical ones the recommended thing is to get A. in and talk to A. But by and large…

P50: But I mean if you don't want to like…I didn't with S. I had my wife and my kids and just get back to normal. I talked it through with my wife. At first I was grumpy and bitchy for the first couple of days and I stayed away from the kids like but the wife was expecting it. And that helped me because I could talk to her about it. And she knew I was getting through with it. But I mean there was people in the crew here were just telling me to ring A. but the wife knew me, twelve years she knows me. "You know if you just want to talk to me talk to me." When any of the other ones that did not affect me as much I just went back home and started messing with the kids, playing with the kids, and that doesn't seem to affect me. They say "what were you at?". "I was at something and somebody died", because they're going to hear it in the school anyway. They say "ok, make me Rice Krispy cakes or something". They keep my feet on the ground.

F: What about everybody else?

P51: Well we have peer supporters and what we tend to do a lot here after an incident is come back here go upstairs to the canteen, make a cup of tea a cup of coffee, sit down and have a chat. If anyone wants to talk they can talk if they don't they don't.

P52: We normally talk about it anyway, yeah it comes around alright.

P49: We do eventually yeah.

P52: Go away home and talk about it to the other half.

P49: And we might meet up that night again or the night after or something is someone feels like that they'd want to chat. And then we decide will be call in A. or what will we do. Could we manage it ourselves? If we can manage it ourselves, grand, if not we give A. a ring.

P47: Like I say I suppose different people have different ways of dealing with it. Some people go very quiet and tend not to talk and…I myself like the feeling is you try and get on and try and learn from it more than anything else. Is there a better way of doing it? And I think that what kind of drives everyone, more than anything else. The more experience you get the better you're going to be at helping people. At the end of the day that's your goal in the whole service. That you're doing good, like. I mean if something goes seriously wrong and you feel you're responsible, I think then you would have a major issue to deal with. But I think because of the nature of the job we're learning from it and trying to make it better all the time you know. Rather than, it's a bad thing to say, we learn off of every accident that will happen you know, whether people ate killed or not, it makes us better for the next one, believe it or believe it not. And I think that's how some people deal with it as well. That, after that one now I'm going to be a better man because of that…provide that something doesn't go major wrong and you contribute to the thing.

P53: I suppose one of the biggest horrors would be giving the incorrect treatment to a casualty. Trying to deal with that afterwards would be…especially of it contributed to a fatality. That would be one.

P47: I think that you get pleasure that you've done the absolute best you've could. You may not have saved a life but you may have helped promote a life or whatever. But I know myself if I was involved in an incident you would like someone to be there to help you. And we know that from our own experience that at least we're coming to help. The people appreciate it, and I think that's how people deal with it as well, you get satisfaction out of that as well. And there's a learning curve with every incident you get to.

P50: Like you said you were dealing with the City (Brigade). There's a big difference between the city and the retained in the sense that if City are involved in a major incident they all go back to the station and they could be there for hours and hours afterwards. But like from our point of view ok as M. said we come back and have a cup of tea, but ultimately we all have to go back to work. So like there is a big difference between us, plus, but having said that, the fact that you're going back to work it takes you out. You have to…you're not dwelling on the situation. Like you have another life to deal with it and just speaking for myself it not a case that I'm putting it out of my mind, because sometimes now say that, the incident with the baby, like I wouldn't have been your first responder but I would have been in the periphery of it. But I was thinking back afterwards and I said "should I be more upset about this and I wasn't". So…is it a case I'm heartless…you nearly feel guilty for not feeling bad.

P53: The circumstances for the casualty to me anyway are important, and I think part of the reason I didn't, I wasn't affected by the baby was that the baby was asleep and the baby inhaled the smoke and stayed asleep. So I mean there was no kind of…you know…as afar as the casualty was concerned, it wasn't a bad way to die, on the list of dyings…of deaths. I'd say imagine knowing or being present while the casualty goes through terrible pain and trauma and possibly sees their own limbs that you know, sharing that with somebody might be a big job to deal with afterwards and while I'm sure I might have implied that these talks after incidents aren't necessarily the best thing, I'm sure if I endured that things I would be fucking rushing back to partake and try and ease this kind of…this head wreck that would obviously come from…The circumstances of how a casualty became a casualty that would be very relevant I'd say.

P49: But like my point K. is did you actually…like as I said I questioned myself afterwards should I be feeling more. Am I a heartless bastard that I don't feel…

P52: Well we won't go there, not while the tape is on!

P47: Like you off load some of it too, you know you off load bits of its subconsciously really. You talk to someone else about it, and it kind of eases the whole thing away. That's why I kind of eases the whole thing away. That's why I consider a group session after an incident…people can off load some bits of it.

F: Do you have that cup of tea after incidents?

P49: We do, and A. usually brings biscuits! (laugh)

P50: Are you implying do we have a cup of tea after every incident?

F: Yeah.

General: Oh no.

F: Ok, not every incident, but if there was an incident with a fatality.

P48: Likely highly likely.

P47: But it depends again. Fellows have other commitments, they need to go away. But normally we would.

P53: Did we think twice about the guy who died in the car…the joy rider fellow? You know, let's be honest now, we were all genuinely affected by A., and baby S., but I can't even remember this guy's name. He stole this car…were you there for up at the other side of the village there by O….you know…is it because we felt that he had it coming, you know. But I'm saying the circumstances of the casualty becoming a casualty can often be very relevant to the way we feel afterwards.

P50: Joy riders are low life…they don't deserve to live.

P51: I thought it too, but they were gone before we even got there.

P47: That's it like.

F: Can I go back to one or two earlier points. The thing about confidentiality, where it was in the paper. What was it about that that bothered you?

P49: It was funny actually, because it was nearly as if it was set up. A. was in with us Monday night before the incident, like it was nearly as if it was planned. That she was going on about that it was confidential, nobody's going to know, you know the pitch.

P50: She said at the meeting that when you have a child fatality it will be an awful lot worse.

P53: But what's the problem…I remember the thing was in the paper and we all have our suspicions about where it came from. But I mean it just said that we as a group were receiving or offered counselling or something.

P47: Well, as far as I know, I wouldn't be certain but I'm sure when the city have any incident with a fatality they put the same thing on the paper. I think it's a standard.

P53: But I think that it's a good thing that the State is looking after its employees.

P49: No, but like what I said the fact that A. was out just a few nights before giving the, as I said the pitch, that it's totally confidential, that it's nearly hammered in stone, written in stone that it wouldn't get out and then…

P53: But I'm saying what was in the paper wasn't a breech of confidentiality.

P47: It wasn't I think, it went through some Senior Officer who said naturally enough, counselling would be offered but the way the paper take it up that we were at counselling.

P49: But even still…

F: Did it in some regards diminish your role or…cast aspersions on your professionalism or…

P53: Did it make girls out of us?

P49: I think you said it D. that people at work were saying, "Jesus Christ, look at ye".

P48: No but I mean it's the family you would think that like you know, they have enough to be dealing with now, and they had the piece on the family and the poor fire brigade at the bottom of it had to get counselling.

P49: That's it, that was our problem at the time.

P50: It was a piece in the paper like but it looked really…

P49: That's after hitting it in the head now what the problem at the time was.

P48: It kind of looked as if like…directed at us…the poor firemen had to get counselling. It shouldn't be directed at us, I mean it's nothing to do with us, we've done out job we're gone we're finished. It's about the family like.

P50: The family were bereaved but we were portrayed as the victims.

P49: It was like we were looking for sympathy.

P47: It was bad journalism more that anything else.

P49: It just didn't look right.

F: That it would offend the family of the victim…

P53: No, no. This specific incident came across that it wasn't a confidentiality problem because first off nothing that was shared in the group was sent out there, no individual was named or set apart or anything like that, it was just that the disproportion of the report was that it gave us an emphasis. And we just did the job, it's the family were bereaved and it went off side.

P49: That's because we didn't have the meeting at that stage.

P51: It looked as if we were going through…trying to say look at poor old us.

F: But you were getting a doing at work.

P52: Getting an auld slagging alright, yeah. "Do you want somebody to hold your hand after every auld late incident you go to."

P53: Normally they wouldn't slag D., because he's so sensitive, they really tread gently around him (laugh). But this scene brought it all out…

P52: I stared crying and went home yeah (laugh).

P51: And when he got home then the wife started laughing at him, so he went back to work.

F: Is there anything else about that…ok about the breach of confidentiality from what I'm hearing there was nothing seeped out.

P47: Oh there was no breach. But it was more the way it was on the paper than anything else, there was no breach…

P49: But the timing couldn't have been worse. The fact that A. was out only a couple of days before hand.

P50: It was actually the night before.

F: If you were to design a support programme, given the fact that it is an inevitable part of your job that you are going to encounter incidents which by their very nature will expose you to individuals in distressing situations, what sort of support do you think should be available to you to help you deal with those situations (if any).

P50: Brandy!

P47: Meal voucher! Bring herself out for a meal.

P48: M. mentioned the fact the we have a peer support programme, well that's there if it gets to the next level, you can go to A. which is good, and you also have the thing that if you don't want to participate in that you can go behind, in secret, go one to one with a counsellor.

P48: That has to be there anyway.

P53: There's another aspect to it, and more so for those working in the private sector, and I mean there's a high change that one of this crew or the others will be seriously affected. Either their mentality or their lives will be at risk if they are traumatised enough by an incident. There are some of us who are employed by the very same local authority but what I mean there may be an employer who would have his employee come back from an incident, not know that this man was at risk, and may give him "down the banks" for being either dozy or late or whatever. That might be…that might compound the problem, because you have your traumatised Fire Man going back to his day job, under fierce pressure, feeling whatever, that he has to put more there putting more stress on himself in his job. Now if there was some way for the employer to be kind of contacted.

P50: Having said that H. not everyone would want their employer informed.

P53: I'm not saying that for a second, but we're dealing with things, we're dealing with outside chances here, twenty million to one and all those kind of stuff, but in the end…

P49: The opposite side to that coin then is if you did tell the employer that, like the thing is "I can't have him working for me, Jesus he's stress out". The person might feel that his job is in danger if it went to that level.

P53: I'm not talking about rules I'm talking about exceptions. That where somebody is kind of known to be or whatever…

P49: You're taking it out of that person's hands then. You actually doing something for somebody that doesn't want it done for them.

P50: I'd say most people would be up in arms about something like that.

P53: Well I mean this is something that professionals would have to judge. But as I said I don't mean it as a rule that everybody's employer is contacted or anything like that.

P51: But I mean if you go to a meeting and you sit there and you don't talk, does that mean, just cause you don't feel like talking, does that mean that somebody should go back and say "he could be having a hard time, I'd better ring his employer".

P53: Well if there was ever a meeting that lasted more than three seconds and I didn't talk I need fucking help.

P51: Well we all know that.

F: How would you know if somebody else in the crew wasn't dealing particularly well with an incident?

P52: I suppose we all know the way we behave on a normal day to day basis. That behaviour changes in any way you notice it you pick it up.

P47: You'd notice, you'd notice.

P53: If somebody started being nice.

P47: Or if there was no one slagging you'd know there was something wrong.

P48: But we're in a different situation then from the City (Brigade) is that you only notice that when…there's a shout or something. We could go a week without meeting each other.

F: What would you do if you noticed somebody's behaviour has changed?

P50: M. there would be the peer supporter. He might go and have a word with him.

P51: Call out, have a chat, keep an eye on him. Let him know you're there.

F: So you'd follow up.

P48: There's always at least one person who would gel with some one and they would click they'd know there's something wrong with them.

P47: And they'd know it, and they kind of ring the alarm bells before the person before the person themselves kind of know it. You'd be surprised when someone's behaviour changes when you're working with them you'd notice it.

F: Ok, but you would say it.

P47: It would get around kind of.

P53: Not that it ever happened but you could have a false alarm in that respect.

P51: Well like as I said with us, we're one of the busier of the County stations. I'd say some of the stations out there could go weeks without an incident and there could be some fellow he mightn't see any of the crew…

P53: Could I come in there on an aspect when T. says you could go weeks without an incident. There was an article in one of the magazines about…it's actually a major difference between the City and the County, full time and retained fire fighters. There's a huge difference, and I'm kind of getting used to it now, the stress of being

available twenty four seven, and there may be no incident at all in that week, but sticking around and it always comes then when you least expect it, for one minute that you've forgotten, that it's gone out of your mind, it's then the alerters go off. And the difference, I know I'm probably not painting this very clearly now, the difference in the City you go in and you're there at nine o'clock and you have a definite starting time and a definite finishing time. When you leave you have no further strings attached to you. But it's like being on a lead here, I and I know others, don't travel very far outside the station and outside the station area. We just make ourselves handy all the time and it's something that hasn't been addressed really. It's spoken about alright, but it affects my life, my working life, my family life, my social life, all those kind of things. I know that's a choice and I could kind of feck off. Don't be getting your hopes up! But it is a huge element of what we do.

P47: There's a certain amount of stress in carrying a pager.

P53: There is, in just being attached to this fecking patch, twenty-four seven. Compounded by the fact that…and you make special arrangements then with one of your colleagues if you are going anywhere, you know. This weekend we were fairly stretched you know; luckily the incidents were just incidental.

P50: I missed a funeral and a removal. My ex-girlfriend's mother died, and I have a child with her. And she's sixteen. And because we were very badly stuck I couldn't go to the removal or the funeral. I didn't try and ask because I knew we were going to be stuck like.

P53: Social freedom, travel and that kind of thing, is different for us than everybody else. And you know some of our partners, now I don't have a major problem in that respect, can get sort of…seem to sort of be odd that they're just around all the time. I don't have kids, they're adult, and there's no sort of, you never take me to the sea side, well when that was true I wasn't able to blame the fire service, whatever. You know but people with kids as retained fire fighters have…they get here with some baggage anyway.

P47: They're stressed before they go to any incident.

P53: And then there's also the stress when the alerter goes off. If you're not handy to the station you're taking risks on the road, and everything getting here that your full-time fire fighter doesn't even know about. He's there he runs down the stairs into the appliance and out he goes and they deal with it.

P50: Yeah, they should be called part-time and we should be called full-time.

P53: A lot of research could be done in that area I can tell you, about…I mean if you were inside my head between the time the alerter goes off and the time…Under normal circumstances I don't want to be inside my own head. No one wants to be inside my head when this is happening.

P47: Like I mean fellows going to a call, they mightn't know what it is till they get there, they're stressed before they get there. So another little bit of stress I don't think…

P53: Having risked life, limb, insurance, car everything, you get here and it's only a fart of an incident – a wheeley bin on fire. But I mean out the road you say this is one where we're all needed here now, this is a major RTA, everyone is going to be needed in every corner and that's how you drive yourself on. You just don't know till you get here.

P51: That's just adrenalin pumping in as well, why are you calling it stress.

P47: That helps you deal with whatever you come across because you're hyped up.

P52: And because of the adrenalin then you go out and find it's a wheeley bin and you go back home and you can't go to sleep, and then the alarm goes off.

P50: That's a brilliant point that you made. You be called out of bed at three o'clock in the morning as I said it's a wheeley bin, and you can't get back to sleep.

P52: Go back to sleep at seven and it goes off at quarter past, time to get up to go to the real job. Then you go in and they wonder why you're tired.

P50: We all should become unemployed I think!

F: What about dealing with the press?

P47: I was at an incident where a TV crew and shoved a camera into my face, that bugged me more than the job we were doing. We were lucky that we were down off the road, and the camera was down on top looking in at this incident and unfortunately I knew the fellow that was in the car plus the fact that we knew that he was dead, but this camera there and we had a difficult ground and everything was against us and the pump cut out and things started to go wrong because the camera was there because fellows was conscious of the camera there. Now what we did was get one of the senior officers to take then away. But I mean I felt that time that that fucking camera was…oh Jesus…it wasn't the incident, the stress of having the camera there was fucking bad like.

P50: Having a camera at the scene is annoying. The night now that we had a fatality out the road and they were there waiting for the car to be taken away, it's annoying. You try to stay away from the camera, you don't want to be pictured on TV or the media. I just find them, after a fatality…

P52: No problem them coming along afterwards and you know, have their shots or whatever, but it's while you're working…

P47: Sure even that morning they arrived at the door looking to come in to talk to people. And we were only upstairs at that stage having a cup of coffee. We were only talking about the incident and they wanted to talk to people to get their views on it. Needless to say they were fucking ran, like. But they still went away and filmed outside through the railings. They went out there, remember we put the gear outside there and we came up here for a cup of coffee, we didn't even clean up the gear like and they were in the railings taking pictures. That's stressful.

F: The model that's there at the moment very much focuses on the trauma being in the fatality or being in the death or the injury or whatever the case may be as such.

P45: Not always. I think fellows are thinking did we do the right thing. A person mightn't have died at all. Did we do that right, did we do this right, could we have done it another way. I know the incident we had in I. I question myself for weeks, did I do this right, did I do that right, until I was happy myself that I'd done all I could. And that's…you know some incidents they mightn't be a fatality at all but you still question yourself and there's stress in that like. But normally you talk it out with someone or you get rid of it some way, offload it on to somebody else.

P45: As K. was saying there carrying the pager is a thing that, I know now that the City (Brigade) wouldn't have to deal with that kind of thing, but in the retained service in Ireland, which there's probably more retained fire fighters than full time fire fighters, like that alone is a burden.

P53: The least we want out of a situation is to stabilise it, thereafter hopefully to improve it. We'd be happy coming back to a station if it's on that side of the bar. But if we make a situation worse, or fail to stabilise it, this is going to add to our pain afterwards whatever the incident was.

F: I really appreciate the input of each of you here this evening – it has been tremendous. Thank you so much for your time.

Duration: 1hr 14mins 50secs

Correlation Matrix Between Sorts

SORTS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1 01	100	92	47	52	56	54	62	27	54	61	71	56	67	66	66	59	59	61	64	64	57	48	66	67	70	45	57	72	86	88
2 02	92	100	53	54	59	61	63	36	52	68	79	62	75	72	73	71	71	72	75	72	66	57	74	75	75	53	65	82	95	96
3 03	47	53	100	94	94	93	69	44	50	43	54	69	62	73	69	61	56	60	58	59	48	46	54	60	73	55	45	65	48	52
4 04	52	54	94	100	93	93	68	46	53	45	56	68	64	75	69	62	58	61	60	61	47	47	58	59	73	54	50	66	51	53
5 05	56	59	94	93	100	96	68	48	56	42	58	73	65	74	69	61	56	59	58	61	49	47	57	62	73	62	46	69	54	59
6 06	54	61	93	93	96	100	68	54	58	48	61	75	69	77	74	65	61	63	62	64	53	55	61	64	77	64	52	71	56	61
7 07	62	63	69	68	68	68	100	43	64	56	51	70	68	62	75	65	62	65	65	66	57	40	60	65	60	31	41	63	59	61
8 08	27	36	44	46	48	54	43	100	30	35	38	50	37	48	48	39	35	34	36	39	56	59	60	42	41	34	26	47	30	36
9 09	54	52	50	53	56	58	64	30	100	45	45	51	64	53	57	41	42	42	41	47	41	34	40	52	54	47	35	47	43	49
10 10	61	68	43	45	42	48	56	35	45	100	71	39	53	57	67	61	58	61	63	60	50	50	57	58	58	39	67	61	69	68
11 62 15 3	71	79	54	56	58	61	51	38	45	71	100	48	60	69	64	62	60	62	64	69	55	53	62	61	75	53	66	70	78	76
12 12	56	62	69	68	73	75	70	50	51	39	48	100	74	68	73	61	60	58	58	60	63	57	60	59	66	54	46	66	54	62
13 62 15 51	67	75	62	64	65	69	68	37	64	53	60	74	100	66	78	66	66	66	66	66	60	53	58	69	67	46	58	65	69	70
14 14	66	72	73	75	74	77	62	48	53	57	69	68	66	100	73	67	66	66	66	70	53	55	61	58	85	59	65	71	67	68
15 15	66	73	69	69	69	74	75	48	57	67	64	73	78	73	100	76	73	75	75	77	55	54	63	71	74	51	56	74	70	71
16 16	59	71	61	62	61	65	65	39	41	61	62	61	66	67	76	100	98	98	97	90	57	48	67	70	64	48	59	74	72	70
17 17	59	71	56	58	56	61	62	35	42	58	60	60	66	66	73	98	100	96	95	88	57	48	66	67	61	48	59	71	71	70
18 18	61	72	60	61	59	63	65	34	42	61	62	58	66	66	75	98	96	100	99	89	54	46	64	71	65	46	60	74	72	70
19 19	64	75	58	60	58	62	65	36	41	63	64	58	66	66	75	97	95	99	100	90	55	49	67	72	66	45	61	76	75	73
20 20	64	72	59	61	61	64	66	39	47	60	69	60	66	70	77	90	88	89	90	100	56	45	70	68	67	48	63	73	70	71
21 21	57	66	48	47	49	53	57	56	41	50	55	63	60	53	55	57	57	54	55	56	100	74	79	68	50	36	41	63	58	68
22 22	48	57	46	47	47	55	40	59	34	50	53	57	53	55	54	48	48	46	49	45	74	100	63	49	52	44	42	56	54	59
23 23	66	74	54	58	57	61	60	60	40	57	62	60	58	61	63	67	66	64	67	70	79	63	100	76	62	41	51	80	67	72
24 24	67	75	60	59	62	64	65	42	52	58	61	59	69	58	71	70	67	71	72	68	68	49	76	100	61	42	52	80	71	73
25 25	70	75	73	73	73	77	60	41	54	58	75	66	67	85	74	64	61	65	66	67	50	52	62	61	100	67	64	76	71	73
26 26	45	53	55	54	62	64	31	34	47	39	53	54	46	59	51	48	48	46	45	48	36	44	41	42	67	100	51	59	47	54
27 27	57	65	45	50	46	52	41	26	35	67	66	46	58	65	56	59	59	60	61	63	41	42	51	52	64	51	100	58	61	68
28 28	72	82	65	66	69	71	63	47	47	61	70	66	65	71	74	74	71	74	76	73	63	56	80	80	76	59	58	100	76	80
29 29	86	95	48	51	54	56	59	30	43	69	78	54	69	67	70	72	71	72	75	70	58	54	67	71	71	47	61	76	100	92
30 30	88	96	52	53	59	61	61	36	49	68	76	62	70	68	71	70	70	70	73	71	68	59	72	73	73	54	68	80	92	100
31 31	37	48	41	47	44	50	45	77	23	40	50	47	43	45	48	51	49	48	49	52	75	73	74	56	39	28	34	57	46	47
32 32	50	56	51	53	53	59	52	61	33	47	50	55	51	52	63	61	58	57	59	59	73	70	76	69	49	33	40	67	54	59
33 33	66	77	62	64	64	67	71	45	51	64	67	72	73	70	77	71	68	70	70	73	68	51	71	78	69	46	66	74	75	75
34 34	76	81	51	59	56	62	68	42	51	67	69	61	74	68	77	73	72	73	75	73	59	53	70	70	67	41	60	68	79	75
35 35	62	70	70	72	70	74	59	47	46	49	68	70	67	71	72	69	69	66	69	76	57	49	72	65	75	58	56	72	66	68
36 36	68	77	63	68	67	71	58	48	44	54	74	73	70	72	74	71	71	67	70	77	61	54	75	65	78	63	64	76	72	76
37 37	68	77	66	66	69	72	58	41	45	58	68	64	65	69	76	75	72	75	75	78	57	54	71	73	70	61	64	83	73	78
38 38	70	80	48	52	55	59	57	30	39	58	71	65	66	68	67	67	67	68	70	70	59	52	64	66	70	55	69	80	78	80
39 39	66	79	69	71	71	75	62	44	43	62	70	70	75	68	72	75	75	74	76	73	69	66	74	75	71	53	67	75	76	78
40 40	68	69	65	69	69	70	65	39	56	48	53	61	61	75	74	65	64	65	66	66	49	48	61	58	70	52	41	76	64	67

Correlation Matrix Between Sorts

SORTS	31	32	33	34	35	36	37	38	39	40
1 01	37	50	66	76	62	68	68	70	66	68
2 02	48	56	77	81	70	77	77	80	79	69
3 03	41	51	62	51	70	63	66	48	69	65
4 04	47	53	64	59	72	68	66	52	71	69
5 05	44	53	64	56	70	67	69	55	71	69
6 06	50	59	67	62	74	71	72	59	75	70
7 07	45	52	71	68	59	58	58	57	62	65
8 08	77	61	45	42	47	48	41	30	44	39
9 09	23	33	51	51	46	44	45	39	43	56
10 10	40	47	64	67	49	54	58	58	62	48
11 62 15 3	50	50	67	69	68	74	68	71	70	53
12 12	47	55	72	61	70	73	64	65	70	61
13 62 15 51	43	51	73	74	67	70	65	66	75	61
14 14	45	52	70	68	71	72	69	68	68	75
15 15	48	63	77	77	72	74	76	67	72	74
16 16	51	61	71	73	69	71	75	67	75	65
17 17	49	58	68	72	69	71	72	67	75	64
18 18	48	57	70	73	66	67	75	68	74	65
19 19	49	59	70	75	69	70	75	70	76	66
20 20	52	59	73	73	76	77	78	70	73	66
21 21	75	73	68	59	57	61	57	59	69	49
22 22	73	70	51	53	49	54	54	52	66	48
23 23	74	76	71	70	72	75	71	64	74	61
24 24	56	69	78	70	65	65	73	66	75	58
25 25	39	49	69	67	75	78	70	70	71	70
26 26	28	33	46	41	58	63	61	55	53	52
27 27	34	40	66	60	56	64	64	69	67	41
28 28	57	67	74	68	72	76	83	80	75	76
29 29	46	54	75	79	66	72	73	78	76	64
30 30	47	59	75	75	68	76	78	80	78	67
31 31	100	77	58	56	48	53	56	43	63	43
32 32	77	100	61	59	52	56	63	50	67	56
33 33	58	61	100	77	72	76	74	78	84	59
34 34	56	59	77	100	69	76	67	68	76	65
35 35	48	52	72	69	100	94	70	65	76	61
36 36	53	56	76	76	94	100	75	75	81	60
37 37	56	63	74	67	70	75	100	75	79	69
38 38	43	50	78	68	65	75	75	100	79	62
39 39	63	67	84	76	76	81	79	79	100	61
40 40	43	56	59	65	61	60	69	62	61	100

Unrotated Factor Matrix

	Factors						
	1	2	3	4	5	6	7
SORTS							
1 01	0.7879	0.1499	-0.3267	0.1119	0.1069	0.0105	0.2454
2 02	0.8834	0.0830	-0.3624	0.1140	0.0640	0.0038	0.1236