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POLICE AND PSYCHOLOGICAL TRAUMA:  
A CROSS-CULTURAL, MIXED METHODOLOGICAL STUDY OF HOW POLICE  
COPE WITH THE PSYCHOLOGICAL CONSEQUENCES OF THEIR WORK

SAJIDA NAZ

A Thesis submitted to the University of Huddersfield  
in partial fulfilment of the requirements for  
the degree of Doctor of Philosophy

November 2012

## CERTIFICATION OF APPROVAL

Police and Psychological Trauma: a cross-cultural, mixed methodological  
study of how police cope with the psychological consequences of their work

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## DEDICATION

I dedicate my work to the loving memory of my late father

*Zakir Hussain Zikriya!* and my mother *Sughra Bibi!*

All what I am today, I owe it to you!

## ACADEMIC BIOGRAPHY

I feel privileged to have honour of being part of a wonderful research team here at the University of Huddersfield. I come from Rawalpindi city, which is twin city to the capital of Pakistan i.e., Islamabad. I have accomplished MSc in Behavioural Sciences (Fatima Jinnah Women University, Pakistan) in 2005 and was honoured with Gold Medal. After graduating, I was privileged to be employed as research assistant at Fatima Jinnah Women University, Pakistan for three years and have been independently involved in variety of research projects such as trauma and psychological health, psychological assessment of police officers and Cognitive Behaviour Therapeutic Model (CBT) and its applicability in various clinical/community settings

I have developed great interest and aspiration for continuing my research in the concept of emotional strength and its diversities in dealing with critical situations. Keeping in view, the society's critical situation, I am interested in exploring how people respond to day to day trauma and what are indigenous ways of coping with the impact of the situations. Besides my studies and research, I am also lecturing in Behavioural Sciences at Fatima Jinnah Women University, Pakistan.

I have published some work related to psychological reactions of earthquake survivors (Oct 8<sup>th</sup> 2005), Dream Content of the survivors of earthquake in Pakistan and neuropsychological deficits of children with learning difficulties. I am presently working towards publishing articles related to the PhD study.

I feel very much honoured of being considered as Ambassador in Centre for Applied Childhood Studies and School representative during my time at the Huddersfield University. It is a great honour for me to be part of enthusiastic and motivated team of researchers at the school and looking forward to collaborate with them from Pakistan. My PhD has enabled me to improve the professional development skills. I am hoping for doing community based research in the area of positive psychology in Pakistan and devise intervention skills to improve the mental health and wellbeing of those involved in sensitive work. I look forward to collaborating with my school, the West Yorkshire Police and the Punjab Police departments to work towards improving the mental health care and awareness of police in the two countries.

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## List of Abbreviations and Acronyms

APA	American Psychological Association
DMS	Diagnostic and Statistical Manual for Diseases
TRiM	Trauma Risk Management
FIR	First Information Report
MPS	Metropolitan Police Service
TAT	Thematic Apperception Test
CPI	California Personality Inventory
MMPI	Minnesota Multiphasic Personality Inventory
CSDT	Constructivist Self Development Theory
PTS	Post-Traumatic Stress
PTSD	Post-Traumatic Stress Disorder
VIP	Very Important Personality
GHQ	General Health Questionnaire
CD RISC	Connor Davidson Resilience Scale
UK	United Kingdom
PAK/PK	Pakistan
CPO	Chief Police Officer
IGP/IG	Inspector General Police
CID	Crime Investigation Department
DTS	Davidson Trauma Scale
CPO	Chief Police Officer
SHO	Station Head Officer
AWT	Army Welfare Trust
ANOVA	Analysis of Variance
MANOVA	Multiple Analysis of Variance
GAS	General Adaptation Syndrome
RQ	Research Question
NIMH	National Institute of Mental Health
EMDR	Electro Magnetic Desensitization R
SREP	School Research Ethics Panel
PASW	Predictive Analytics SoftWare
RSA	Resilience Scale for Adults
SOC	Sense of Coherence Scale
GT	Grounded Theory
HSCL	Hopkins Symptoms Checklist
TMR	Trauma Metabolic Reaction
FJWU	Fatima Jinnah Women University

## Abstract

The current study explores cross-cultural issues related to coping styles, stress management, resilience, and sociocultural factors that impinge upon the lives of law enforcement professionals. Although a substantive amount of literature suggests the association between trauma exposure and psychological disturbance, there is scarcity in the literature in terms of understanding how police officers involved in traumatic work experience, cope and achieve resilient emotional reactions. In order to fill this gap in the literature, this cross cultural comparative study examined traumatic experiences of police officers in the specific forces of Pakistan and Britain. Main objectives of the study were to a) understand meaning of trauma, emotional reactions and coping b) understand type of traumatic events/experiences, and c) to find out predictors to effective coping and resilience in the two countries. It was a mixed methodological study, therefore preliminary interviews (n = 10) with senior police officers were analysed to develop a comprehensive police trauma survey in both countries. In addition to the self-developed scale, Conner Davidson Resilience Scale (CSDR-10) and General Health Questionnaire (GHQ-12) were used to measure resilience and mental health. Six hundred and thirteen police officers (300 from Pakistan and 313 from the UK) responded to the survey. Quantitative findings suggested significant mean differences on CSDR-10 suggesting that although both forces had adequate level of resilience, Pakistani police officers showed comparatively less resilience level than British police officers. Moreover, the findings suggested strong association between officers who were exposed to highly traumatic incidents and psychological impact. The trauma exposure and resulting psychological disturbance appeared to be strongly associated with both resilience and mental health scores. The qualitative aspect of the present study helped in developing a model of understanding trauma experiences and coping by looking at specific socio-religious norms and practices and their psychological impact. Such a cross cultural study can enhance the understanding of how coping can be improved and existing resources can be made robust enough to cope better within a diverse policing context. The importance of incorporating personal challenges of police officers while formulating plans for improving performance culture has been suggested. The proposed “trauma metabolic process model” (TMP) was tested using path analysis and can be applicable and useful in various clinical and organisational settings.

**Key Words:** Trauma Exposure, Trauma Impact, Performance Culture, Police Culture, Psychological Assessment, Coping, Resilience, Mental Health, Emotional Metamorphosis, Traumatic Experience, Trauma, Psychological trauma, England, Pakistan

## 1 INTRODUCTION

Concept of trauma has received considerable attention in the past. Researchers, such as Ward, Lombard and, Gwebushe (2006), have discussed the impact of dealing with life threatening situations, including aftermath of natural disasters, on the mental health of emergency workers such as ambulance workers, police, and military personnel. An increasing number of research investigating the impact of working in traumatic situations in the police work is carried out in the western context such as USA, England (Green, 2004) and Australia (Evans, Coman, Stanley, & Burrows, 1993). However, there is little knowledge about how the emotional reactions to trauma and the coping practices are conceptualized in a multi represented police setting of developing countries. By exploring the traumatic experiences of Pakistani and British police officers, this mixed methodological research looks at cross cultural aspects of dealing with the psychological consequences of police work such as nature of traumatic experience, and perception of coping and support. It also includes the opinion of psychiatrists having an experience of working with the police force, to reflect on the condition of psychological support available in the two countries. Such a cross cultural examination can enhance the understanding of how coping can be improved and existing resources can be made robust enough to cope better within a multi-ethnic policing` context.

The police officers in Pakistan have been involved with the war on terrorism for several years (Lösch, 2006) and, as a result, their adaptation skills have been tested by the adversities occurring in the country in the form of terrorist attacks and bombings (Petri & Govern, 2004). In the past three years, almost 1200 Pakistani police officers have been killed and above 1000 injured in the line of duty (Abbas, 2011; Weathers & Keane, 2007). These types of tragic experiences, along with the on-going work related traumatic experiences test the resilience and coping skills of the Pakistan police. While most of the police personnel are resilient, many of them still experience trouble and need support in handling stress or emotional reactions at some point in their lives.

In 2011, the Punjab Police took an initiative to let personnel undergo psychological testing after considering the evidence of psychological disturbance and possibility of potential harm in the future (Punjab Police, 2011).

According to the official website of Punjab police:

“A team, comprising a doctor from the police department, a lady constable holding a master`s degree in psychology, SSP headquarters and SP security, will conduct the assessment of the police personnel.”

(Punjab Police, 2011)

This step was considered important after the police authorities in Pakistan took notice of the bizarre behaviour of an elite force police officer (suspected to have a personality disorder) who killed the Governor of the Punjab province while performing duties to safeguard and protect him (Rahman, 2012). The peculiar and bizarre behaviour of police officers off and on duty (in the form of brutal punishment procedures and rude behaviour with the public) is not new. Pakistani police who are being labelled with black corruption<sup>1</sup> and being most unruly (Abbas, 2009), are thought to be involved in inefficient performance of duties. The possible explanation for poor performance and behaviour is thought to be some personality disorder (Punjab Police, 2011).

There is an increase pressure of performing well in the given circumstances of Pakistan. As a result, a large number of officers have lost their lives or limbs while performing duties. In these conditions, fewer resources are available to compensate for the emotional/physical and financial loss experienced by these officers and their families. Contrary to this, the relevant authorities (including the police and Punjab Government) have invested on increasing monthly increment, providing better logistics (in the form of vehicles and weapons), providing allowances, and compensation packages (such as shuhuda package<sup>2</sup>). Although useful, these measures still do not appear to address the psychological and emotional damage being experienced by these officers on a regular basis. It appears that the police officers` needs are not fully understood by the Pakistani authorities and their persistent negligence can escalate the mental health problems and concerns in Pakistani police.

In the psychological context, one can argue that the bizarre behaviour is a representation of the complex psychological world inside the police mind, which needs more understanding and exploration considering the local and situational context. This police attitude is not

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<sup>1</sup> Black corruption in a given society is a reprimanded behaviour both by the public and by experts

<sup>2</sup> Shuhuda (martyr) package is a compensation program offered to those who have lost their lives in the line of duty. Such compensation involves financial, medical and accommodation facilities.

unique to Pakistan, the situation is similar to Indian police who have been reported to display emotional disturbances quite frequently (Fasihuddin, 2009b); similarly the police in Nigeria (Ward, et al., 2006) and Nepal (Bayley & Perito, 2011) is facing similar crisis. The situation in Afghanistan is no different from the rest of the countries. The security forces and their posts in Afghanistan are regularly attacked and damaged by the factional fighters (Murray, 2007). One explanation for alleged involvement of police in the misconduct could be prevailing corruption and economic crisis (Heller, 1975). When compared with the behaviour of police forces in developed countries, the psychological risk appears to be the same, though different in intensity and gravity. For example, a growing number of research evidence suggests an increase in mental health problems in the UK police sample during the past few decades (Williams, 2011).

To understand the positioning of social and psychological research, the researcher examines the traumatic experiences in police work and identifies factors associated with resilience, to understand how police officers cope from such an impact. A cross-cultural comparison approach will allow for an understanding of the multidimensionality of trauma and coping skills, which will expand general understanding of the phenomenon. What follows from here is an attempt to provide a background and rationale for the present study.

#### *Trend of Police Literature on Trauma*

During the past few years, there is an increase interest in studying factors that can enhance work performance and resilience in the police setting (Hollnagel, Woods, & Leveson, 2006; Lumb, Breazeale, Lumb, & Metz, 2010; Violanti & Samuel, 2007). A number of studies evidence the possibility of psychological harm associated with performing duties such as dealing with dead bodies or investigating crime scenes (Arnetz, Arble, Backman, Lynch, & Lublin, 2012; Ma et al., 2011; Spurgeon, Mazelan, & Barwell, 2012; Tuckey, Winwood, & Dollard, 2011). Research also suggests that working in a stressful environment and dealing with highly sensitive content can impart psychological sensitivity towards those involved (Lee Duckworth, Steen, & Seligman, 2005; Schueller, 2009; Sesma, Mannes, & Scales, 2005). Despite the efforts to improve the wellbeing of police personnel, the increasing number of sick leaves and dissatisfaction with the work are disquieting for the police authorities, and signify a need to evaluate the causes and factors behind such situations (Arnetz, et al., 2012; Collins & Cartwright, 2012; Patton & Johns,

2012; Tuckey, et al., 2011). These evidences suggest that studying the post-trauma recovery is equally as important as diagnosing psychological problems and diseases (Seligman, 2012). The positive psychology paradigm (Seligman, 2012) provides a holistic vision to study illness and recovery by bringing together the knowledge from both distinct yet interconnected domains, and is widely being used clinically (Linley, Joseph, & Seligman, 2004; Peterson, 2006).

In terms of health psychology, it can be argued that it is an organisational, moral and ethical obligation to ensure mental wellbeing of their employees (Mazzola & Kessler, 2012). This is more important for those organisations who are involved in highly sensitive tasks and duties, such as emergency workers who are responsible for being alert for any call, for example, police, nurses, military personnel and fire brigade. The police authorities in the United Kingdom (UK) as well as in countries such as Pakistan (PAK) are beginning to recognise this and the police in England have established occupational health units as a first step for this purpose (Barton & Barton, 2011).

One of the increasing concerns facing police organisation today is to determine efficacy of trauma management support available to its officers (Regehr & LeBlanc, 2011). Also to manage the increase in sick absenteeism (Redman, Hamilton, Malloch, & Kleymann, 2011) (for those who are genuinely sick) and those whose concern is related towards mental health (Spurgeon, Mazelan, & Barwell, 2012). The concerns over increase in sick leaves and absences in U. K. police forces is not new and surprisingly the concerns are increasing with the advent of new cuts in the police force (Barrow, 2011). With the scenario that there might be decrease in police numbers, the burden of work is likely to increase and therefore, mental health concerns may escalate in coming days. The increasing organisational concerns for improving mental health for better efficient performance, has resulted in an invasion of a `performance culture which, peculiarly is designed to facilitate the officers to regulate their disturbing crisis situations (Ning, 2011). The police performance is measured by a set of achievements during a period of time (Hunt, Irving, & Farnia, 2011).

In many cases, the officers who are injured while performing duties are suggested to return as early as they can, because returning back to routine work is thought to impart emotional regulation (Stewart & Rock, 2011), but the question remains does it really work? A recent study identified dissatisfaction among a majority of police men and women over the

demand of returning back to their duties (Webster, 2008) and not being able to process their emotional disturbance (Deflem & Sutphin, 2009; Soklaridis, Ammendolia, & Cassidy, 2010). What method might be appropriate to help these officers cope? What measures they undertake to compromise with the situation they are? These are some of the questions addressed in the present investigation. The comparative survey identifies several indigenous measures of coping with trauma and identified challenges in the way of healing. One of the challenges identified in the survey, was that of the performance culture and its increasing emphasis in today's policing (Cockcroft & Beattie, 2009). In the current study, an informal interview with a force psychiatrist revealed that the "*emphasis towards continuing performance*" is because police authorities expect that such a stress may improve their mental health and work performance. The results in the survey were contradictory. A majority of the respondents from the England police force were dissatisfied with the performance culture and considered it as an increasing burden for them (See chapter 8 for results).

The above-mentioned factors stimulate the present study, which attempts to understand how different work environments can influence the coping capabilities, considering that the nature of threat and risks are different in cultural contexts. This study will explore how meaning and understanding of calamity or suffering can define the healing aspects and help in the process of growth in general.

### 1.1 Context of the study

In Pakistan, the overall crime rate, terrorism, political instability and attacks on armed/police forces have increased (Abbas, 2011). Both natural and manmade disasters have left several people having different psychological problems (Dupont & Tanner, 2009). Personnel involved in the provision of health, care and security, such as police and military, are indirect survivors of trauma (vicarious traumatisation) which makes them more vulnerable towards mental health concerns and robustness at work (Ali, 2008; Gabriel et al., 2007). As a result from war in terrorism, Pakistan police has lost more than 6000 police officers over a period of time (Abbas, 2005). A similar trend was observed in the UK police force, where G-20 protests questioned police control over their emotions (O'Prey, 2009). These incidents provoke a need to understand how police officers manage their psychological crisis given the conditions prevailing in the two countries.

During the past several decades, researchers have identified several factors, which increase the risk that police personnel might struggle in order to overcome adversity (Weissman et al., 1996). Under the circumstances, which are inevitable in police work, psychological resilience helps to overcome the risk of developing psychological crisis and fighting back against adversity. Literature indicates high association between certain personality attributes, work pressure and health related issues (Danna & Griffin, 1999). The study of resilience in the context of promoting positive mental health in police personnel is in its embryonic stage. The shift of gathering information based on signs and symptoms towards studying health promotion factors has revealed interesting findings.

Considering the scale of psychological disturbances, individual and socio-cultural factors as highlighted in previous researches, it becomes extremely important to have an understanding about how these personnel manage the psychological concerns resulting from their work related experiences.

Within this context, this study attempts to look at various traumatic experiences within specific police departments in order to understand the cross cultural . Ten senior police officers serving on senior posts were selected using purposive sampling strategy technique to take part in face-to-face interviews. The qualitative data gathered was analysed by coding and thematic analysis as defined in Grounded Theory Approach. The evidence from the interviews suggested several common themes relating to the issue of trauma exposure, the importance of the roles of support network of family, friends and work colleagues, appraisal and coping/adjustment strategies. The study has highlighted the importance of socio-cultural beliefs and self-appraisal related to effective dealing under traumatic encounters. This study recommends certain areas for further investigation such as emotional management (resiliency), coping mechanisms and role of socio cultural beliefs.

### *The police work*

The police work involves protection of life, safeguarding property through vigorous patrol techniques, enforcement of laws and ordinances in the cities for which the Police Agency is responsible. The job needs officers to possess characteristics involving dedication to the profession (Henry, 2004), strong emotional strength to deal with critical situations (Garbarino et al., 2012) and certain personality traits (Chauhan, Desai, Enforcement, Seeking, & Relations, 2010). The police as a profession are subject to stress as exposure

to critical incidents/situations is inevitable. A wide amount of research examines negative effects of stress on people in general (White & Klinger, Brandl & Strohline, 2012; 2012). The police work is one of the top rated professions for job stress next to air traffic controllers and dentists (Nydegger, 2011).

The following table lists those occupations which equal or exceed the rate of 6 on a stress rating scale of 0 to 10 elaborated by the University of Manchester Institute of Science and Technology (Landsbergis, 2009).

Table 1-1: Occupations with high stress levels

Occupation	Rating scale
Miner	8.3
Police officer	7.7
Prison officer	7.5
Construction worker	7.5
Airline pilot	7.5
Journalist	7.5
Advertising executive	7.3
Dentist	7.3
Actor	7.2
Doctor	6.8
Broadcasting personnel	6.8
Nurse	6.5
Film production crew	6.5
Ambulance personnel	6.3
Musician	6.3
Fire-fighter	6.3
Teacher	6.2
Social worker	6.0
Personnel manager	6.0

As evident, police is one of the top rated professions, which are highly stressful. Police officers run a high risk of being attacked, wounded or even killed by criminals (McMains & Mullins, 2010). They may also suffer from "friendly fire" (Tiesman, Hendricks, Bell, & Amandus, 2010). Police officers usually live under constant apprehension of physical

danger, work long and irregular hours, and are exposed to unpleasant sides of life (Shea, 2010). This often results in psychological stress, family and personality problems (Agolla, 2009; Berking, Meier, & Wupperman, 2010).

The human capacity to be resilient in order to improve their survival approach depends upon a number of events and circumstances happening in the world. As the 21<sup>st</sup> century brought with itself an enormous number of challenges in the form of calamities, disasters and trauma phobia (Gao, 2011), the need to understand how people can adapt with these outgrowing (and outnumbering) challenges was felt (Ali, Farooq, Bhatti, & Kuroiwa, 2011; Johnston, Becker, & Paton, 2012; Naeem et al., 2011). Human existence is filled with ample examples of how nations survived and paved their way through outstanding difficult situations (Fisher, 2011), such as disasters, earthquakes etc. Taking example of Pakistan's October 8<sup>th</sup> earthquake (2005) which resulted into massive casualties, people gradually learnt to get back to life, with the limited resources they had (Abid & Savage, 2009; Bittenheim, 2009). This adaptation, growth and ability to come back to normal state after being struck with suffering (beyond normal control) is an example of a resilience adaptation (Zimmermann & Issa, 2009).

The police work is a particularly stressful occupation when considering the fact that they are a distinct segregated group (from the community) who are hesitant in talking to "outsiders" or have a "status quo" to not show weakness in front of their peers (Griffin et al., 2010). This aspect distinguishes the police service from other emergency services. They have to work alone for an undeclared number of hours and can be called on duty at any time and thus need more training in mental health related issues

Besides the police, various other professions are also vulnerable towards psychological harm. They include nursing, military, ambulance services, fire-fighters, or other rescue service providers (Gist & Devilly, 2010; Gist & Taylor, 2008). It suggests that the nature of work may be considered as a causal factor (or a contribute) to the psychological trauma (Baxter & Baxter, 2011; Maguen et al., 2009; Pierce & Lilly, 2012; Pomaki, Maes, & ter Doest, 2004; Saks & Rahaman, 2011; Tennant, 2001). During the past few decades, the emergency workers complain about psychological disturbance on numerous occasions after working in a sensitive area. For example, in 1980, there was a fire in the Bradford stadium killing almost half of the spectators. The police was called immediately for

evacuation purpose. Following the fire incident, when these officers underwent psychological examination, a large number of them reported fatigue, panic, flashbacks and other forms of trauma (Duckworth, 1986). Several other authors have also reported similar disturbances in officers involved in sensitive work (Jewkes & Andrews, 2005). These examples show that nature of work can be a risk factor while studying the impact of trauma related aspects of work place. Since the harmful effects are likely to emerge after performing such duties, it is important to consider the mental health and wellbeing, or the capacity and tendency to recover (a natural way of healing).

Dealing with work related situations can be traumatic and the response to trauma affects the way these personnel will cope and recover from their psychological troubles. Police organisations are only beginning to understand what psychological issues are prevalent in their personnel and what steps can help to avoid them. Quite recently, resilience has caught the attention of policy developers in how to increase capacity to be better resilient.

## 1.2 Rationale of the present research

The police in Pakistan today have become a symbol of fear and curiosity in several ways (Abbas, 2011; Moïsi, 2009). Firstly, the public feels terrorised by the police (Akhtar, Rafiq, Asif, Saeed, & Kashif, 2012), due to their atrocious punishment procedures (Chaudhry, Haider, Nagi, Ud-Din, & Parveen, 2008) i.e., using third degree methods, corruption and bribery and lack of justice within the organisation (Khan, 2007). In addition to that, lack of communication with the public has led to a general misunderstanding about the organization and purpose of police in the country (Grare, 2010). A series of terror attacks, unstable governance and high crime are some of the other issues confronting police today (Ras, 2010).

These challenges are not new to the police in developing countries where law and order situations are seldom stable. Looking at the political history of Pakistan, it becomes clear that the establishment of British constabulary in the newly formed Pakistan had motive of “ruling over people” and “punishing culprits” rather than providing safety and security (Talbot, 1998). The role of the police officer underwent transformation as global events in politics shaped the atmosphere of the country. Furthermore, historical incidents such as that of 9/11 brought forward problems and challenges experienced by the police force

related to exposure to trauma and psychological disturbance worldwide (Bowler et al., 2011) and in the developing countries specifically (Berger et al., 2011).

Due to the increased global pressure about terrorism control and monitoring, the internal security threats have been increased in Pakistan and as a result, the work related pressures are even more as compared to what they were in the past. In the present world, the police are required to be resilient against the increased risk of crimes and sensitive responsibilities. As part of ensuring improved resilience and better training amongst its officers, the police authorities in Punjab, have made claims to have taken substantial steps to help its officers meet the work related demands (Javaid, 2010). Despite of these claims, the higher authorities seem to ignore the psychological cost paid by these officers and pay little attention towards understanding and improving their mental health state.. Moreover, these claims (or promises) are limited to the papers and in files and no credible step has been taken to date to ensure mental health fitness (Abbas, 2011; Cordner, Cordner, & Das, 2009; Ras, 2010).

As a result, the police officers today seem to be vulnerable against growing pressures. While the police organisations recognise the impact of work related contributors towards personal and professional wellbeing, the developing countries lack resources and understanding of the needs to ensure mental well-being of those involved in critical operations. Pakistan is also in the list of such countries (Blom, 2011).

There have been several indicators in the past showing the mental disturbance or frustration in the personnel which has either been neglected or blamed to secondary factors. Contrary to this, there is another aspect of heroism where there are examples of brave police officers (Lieven, 2011) sacrificing their lives without being afraid and thus showing resiliency even being under-resourced (Khan, 2009). This combination of bravery and heroism compared to the dissatisfaction and rebellion are very important aspects to consider in terms of police resilience and coping. Several indirect factors such as work atmosphere or community attitude, organisational support and performance expectations or pressures affect modification or alteration of police personality and therefore their outlook on life and trauma.

### *Existing Knowledge*

Resilience is a product of interaction between cultures, groups and organisations (also known as systems). Since all these “systems” are involved in, for example, a disastrous situation such as natural epidemic or air crash, the impact of resilience on those involved in the rescue as well as those effected is of vital importance when these incidents are quite “routine”. The Police organisation is a most relevant interest group since they are involved and utilised in all sorts of crime (or disrupt), as well as for establishing security and safety. Working under a situation which can be potentially harming, can have psychological implications. Whilst it can lead to insecurity, fear, anxiety or other forms of neurosis (or more severe psychosis), it can also help in establishing better ways of adaptation and coping. Those involved learn to adapt with their fellow workers, working in similar situations, understanding each other’s coping skills etc. A large part of learning comes from understanding how different people learn to adapt out of adversity.

Some of the well-known names in the field of coping towards trauma research include Lazarus (Monat, Lazarus, & Reevy, 2007), Rice (Rice, 2011), Morash (Morash et al., 2008). A large amount of trauma research has explored the negative impact of dealing with negative situations among various professionals such as ambulance personnel (Kirby, Shakespeare-Finch, & Palk, 2011), nursing (Shirey, 2006), traffic sergeants (Deb, Chekraborty, Chatterjee, & Srivastava, 2008), teachers (Zhang, 2011), military (Meichenbaum, 2011) and the police (Greshon et al., 2009; Mahendra, Austin, Kumar, Mahendra, & Felix, 2012). Despite these efforts, there is a growing need to examine how to improve the resilience with given resources and needs, especially in the police setting. Although a growing amount of literature is beginning to focus on the post trauma growth, there is still a scant effort to enhance understanding about the issues and coping related to young police recruits. The present research integrates the aspect of service duration wise variation in coping skills and the challenges of these officers at various stages of their career.

### *Indicators of Psychological Disturbance in Pakistani Police*

Slowly and gradually, the police authorities in Pakistan are beginning to understand the need for psychological evaluation of police personnel (Ellahi & Manarvi, 2010). It happened after a cascade of incidents where police personnel displayed socially undesirable behaviour. A police officer from an elite force, for example, killed Ex Punjab

Governor Salman Taseer due to a religious disagreement (Punjab Police, 2011). In another occasion, a youth suspected of committing a crime was shot to death by six ranger personnel who, after shooting, kept watching the young boy till he bled to death (International, 2011). These incidents (and several similar others) strongly question whether there is confusion about rules and orders improperly given to the personnel on duty or there is some psychological “wear and tear” in these personnel being expressed in the form of irrational unjustified acts. The aggressive and rude behaviour of police also invites debates as to whether or not their work related unpleasant experiences contribute to explain these responses or behaviour.

Police work is eventually a challenging task although those who aspire to become a police officer foresee it as a thrilling and exciting experience. The selection of police personnel all over the world focuses on individuals exhibiting resiliency traits (De Fruyt et al., 2009). In developing countries, such as Pakistan, where there are limited resources/facilities in comparison to the nature of crime and disruption in the country, the police work experience is rather emotionally draining (Fasihuddin, 2009a). Many officers exhibit frustration over deficient resources to combat crime and the inability to ensure their own protection before setting out to safeguard others. A senior police officer from Khayber Pakhtoonkhwa<sup>3</sup> (prime target of terror attacks) referred to policing as the most dangerous experience in Pakistan:

"Insurgents can see when I go someplace and wait for me to return and kill me," he said. "It isn't my own death that I fear, but every time there is an attack, it demoralises the whole police force."

(Press, 2008b)

Target killings, terrorist attacks, accidents, murders, political unrest in the country are some of the several challenges towards resilience for Pakistan police (Abbas, 2011) who are battling with producing efficient responses to duty requirements. Whilst the organisational pressure to perform well remains, the psychological implications and disruption from routine duties need to consider mental health issues while working in such serious situations/conditions.

Contrasting and comparing trauma experiences in the two countries (i.e., Pakistan and British Police) with different socio economic conditions and political situations, provides

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<sup>3</sup> Province in Pakistan

an understanding about the diversification of trauma processing and coping. It can also help to identify how to manage available resources in order to improve the resiliency. The law and order situations and threats are present in every country irrespective of having the capacity to fight with crime. For example, police in Britain are experiencing concerns regarding police sick leave following police cuts announcements by the government. British police have a history of dealing with riots and disruptions (Hills, 1995). They have encountered and shown a resilient response to a number of events such as the Bradford fire (Vaghela, 2009). Few, however did appear to display emotional instability (such as those observed in the London Riots (Vrouva & Dennington, 2011)). Several similar experiences invite a need to investigate the resiliency and coping strategies while dealing with trauma. Dealing with stressful and unpleasant tasks is indeed challenging and has psychological repercussions.

### *The police as a profession*

The Police is an appealing career because it has moral appeal (allows one to perform humanitarian tasks), offers plenty of job benefits (free medical and educational facilities) and comes with job security (Neely & Cleveland, 2011). Whilst those who join the police are highly ambitious and devoted to protect and serve people, duty related encounters with emotionally exhausting situations may decline their motivation over the period of time (Wu, Sun, & Cretacci, 2009). As with any emergency work, there is an emotional cost involved when confronting and managing with the trauma, thus it can be highly stressful experience to work under such conditions. For this reason, the young recruits undergo psychological training to strengthen their awareness about how to manage stress and upcoming threats in police life. When the young recruits are selected, special consideration is given towards examining their resiliency (Huddleston, Stephens, & Paton, 2007). Resilience is considered as an important indicator of emotional strength which is a pre requisite in police work (Hunt, et al., 2011).

Police personnel generally adapt and cope with these stressful conditions over a period of time (Paton, 2009). What helps these personnel to deal with adversity? The most frequently reported factor assisting in positive growth is resiliency (Arnetz, Nevedal, Lumley, Backman & Lublin, 2009) i.e., an “on-going” process that requires time and effort to engage in taking a number of steps towards improvement.

Each police organisation aims at producing stronger, emotionally well-equipped officers who can meet the demands placed by the Job (Detrick, 2012). There are two possibilities when a police officer encounters unpleasant and distressing situations. Either he/she comes out emotionally stronger (Moad, 2011) or they can become overwhelmed with guilt, anger, doubt, anxiety and depression (Pineles et al., 2012) (e.g., why I could not save lives when I think I could have if I had backup support!). The consequences to being disturbed with such feelings might affect personal (e.g., relationship problems) or professional (e.g., dissatisfaction with job) life.

These outcomes of a traumatic situation may depend upon several factors, such as departmental policy/support, media involvement, psychological support resources, previous training, work experience, and on-going life problems (such as financial, marital or health issues).

For example, a police constable shared the following with a local newspaper:

"These people (terrorists) are among us. Look here: Our technical capabilities are so weak that we don't even have the ability to listen or to trace these phone calls," he said. "How are we supposed to know who it is that is coming here to kill us and when?"

(Press, 2008b)

Under these circumstances, resilience plays a vital role in avoiding getting into the loop of psychological difficulties. Resilience is like a backbone for a police force where the psychological impacts of dealing with adverse situations is well apprehended and most expected (Delahanty, Koenen, Pole, & Daniel, 2010; Peres et al., 2011).

What police organisations or personnel can do is to enrich their emotional competence and personal tendencies towards raising their own awareness and allowing themselves to emerge more strongly after each incident or experience. Understanding resilience in police personnel gives better understanding about how to develop ways to promote competence in more vulnerable groups within the police (such as those with weaker emotional competence).

#### *Pre Requisites for the selection of police officers*

The police organizations draft the criteria for its officer's selection quite carefully, considering the amount of psychological strength and readiness required to execute duty related tasks involving emotional sensitivity. There is a general requirement of selecting

officers with appropriate physical measurements (criteria is different for various police forces), intelligence tests, educational attainments and resilience testing., In Pakistan, the recruitment measures assess the level of mental health and fitness of its personnel using psychometric tests; however the validity and reliability of these measures is questionable. Although the recruitment agencies ensure that the officers selected for the service are able to display a resilience attitude, an increasing number of sick leaves (Holmgren, Dahlin-Ivanoff, Björkelund, & Hensing, 2009), sickness absenteeism (Körlin, Alexanderson, & Svedberg, 2009), sickness presentation (Leineweber et al., 2011) in the British police force (as well as other countries) is astonishing.

The news reports are full of stories indicating police misbehaviour, showing a lack of control over their emotions, being aggressive, harsh, frustrated, and unjustified use of power. While the police organisations are struggling to devise and implement plans which can reduce their risk of psychological disturbance (Arnetz, et al., 2009) (such as skills attained through proper training), one might ask why the behaviour still continues to increase and situations going worse? The reason might be the lack of routine or regular assessment in connection to the growing global changes. The increase in terrorism and violence has challenged the police roles globally. The police have to perform additional duties to guard the risk prone places (such as parliament houses) and it has posed new threats to their own safety. Their psychological struggle with on-going issues and challenges may appear in their routine behaviour and attitude toward the public/community, within organizations or at their homes. The police behaviour is criticisable in both developing and developed countries although the range and magnitude of the concerns might differ between the two.

The lack of proper facilities (in comparison to increasing violence and threat) is another factor that can explain why police behaviour or performance is not satisfactory in developing countries such as Pakistan. Similarly, the persistent increase in police sick leaves and absenteeism in developed countries (such as Britain) reflects that there is need for regular psychological assessment (of needs, risks and vulnerabilities) and the organizations need to understand the risks, vulnerabilities and protective factors towards health related outcomes in their employees.

### *Psychological Consequences to trauma exposure*

Literature has shown that working in situations involving threat to personal safety might incur damage to the psyche resulting in various personal and professional difficulties.

Some of the pressures involved in police work include:

- **Threat and violence:** The growing threat of terrorist attacks and increase in violence can be a cause of psychological distress. For example, looking at the police reaction/response in the G-20 protests, England (Hoggett & Stott, 2012), lawyers movement and riots, Pakistan (Traub, 2009), Killing of high profile personnel by their own bodyguards (Punjab Police, 2011), one can imply that the threats towards such risks can have profound psychological effect,.
- **Work Climate (Organisational/Political/Social factors):** For example: law and order situation in the country, work load, diversity or monotony of ask in hand and shift hours can cause stress.
- **Personal Challenges:** These might include on-going family problems, moral dilemma (e.g., disagreement with a particular arrest on religious grounds), dissatisfaction with Job, low self-esteem and morale.

Working under such conditions might be challenging and occasionally life threatening. Some of the psychological consequences most frequently observed in trauma literature can be divided into two spectrums i.e., the psychological consequences (Simpson, 2009) and positive growth (Burke & Shakespeare-Finch, 2011). Examples for psychological consequences include various forms of stress disorders (such as Cumulative Stress, Post Traumatic Stress (PTS), Post Traumatic Stress Disorder (PTSD), depression, metabolic disorders, cardiovascular disorders (Gershon, et al., 2009; Violanti, 1992; Daniel S. Weiss et al., 2010). Positive growth can be observed in the form of improved mental health, self-efficacy and resilience (Chopko, 2010).

Evidence suggests that an accumulated (or sudden) unaddressed (or unconscious) range of traumatic experiences may proliferate the psychological resilience – an important ingredient to combat adversity (Yehuda, Flory, Southwick, & Charney, 2006). Literature addressing risk and protective factors towards health outcomes indicate that the nature of trauma (in terms of its range and magnitude), environmental (such as work climate) and

self-related factors (such as personality) integrate to disperse individual's response to trauma (Harvey & Bryant, 1999; McCann & Pearlman, 1990). Scholars in the field of trauma (Follette, Polusny, & Milbeck, 1994; McCann & Pearlman, 1990; Stephens & Miller, 1998) have identified several risk factors which may influence resilience. These factors can be divided into pre incident factors (such as preparedness and readiness), post incident factors (e.g., support and debriefing) and within event factors (such as handling causalities, nature of content observed or dealt with, stress to complete investigation on time and with accuracy). These three elements influence how police officers deal with a given traumatic situation.

### *Cultural Factors*

Cultural factors are often entrenched deep in an individual (Waldegrave, 2009). A person's cultural background may influence how he/she responds to different stressors (Mattar, Droždek, & Figley, 2010). Social interaction could be a positive way for a person to manage his/her environment (Moore, 2011). Cultural diversity allows individuals to use a variety of resources to enhance resilience (Dutton, Roberts, & Bednar, 2010).

Cultural understanding of how police personnel utilise existing resources and manage to cope with the stressful effects of their work would be very relevant before planning intervention programs for police organisations which are multi-ethnic or diverse. Without a common understanding of personnel belonging to diverse backgrounds such as region, religion, gender, or socio economic class etc., the trauma management might be ineffective.

Cross cultural perspectives on trauma experience has shown that trauma is a relative term and its conceptualization, understanding and meaning would differ across cultures (Delle Fave, Massimini, & Bassi, 2010; Herbert & Forman, 2010). This also suggests that the trauma management varies across different cultures according to the availability of resources and support seeking behaviour or attitude.

The police literature has a gap in understanding how police personnel from different cultures experience trauma and manage to cope. A limited number of studies, which have compared trauma and recovery responses (Deb, et al., 2008; Delle Fave, et al., 2010), indicate that trauma is a relative term and because of its variation in definition and perception, dealing methods are different depending upon several socio-cultural factors.

Understanding cultural dimension might facilitate those police forces, which have multi ethnic representation of police. While exposure to trauma might result in the same reactions universally (emotional, behavioural or physical), the cultural and social factors might influence how the trauma is perceived and expressed. Understanding cultural variation in trauma expression and management might help police personnel to improve their skills to manage their personal wellbeing. The present paper describes anecdotal accounts of traumatic experiences as explained by police personnel focusing on how they dealt with psychological outcomes. To facilitate these discussions the first section presents an overview of the structure of this thesis from both a conceptual and theoretical perspective.

Although a wide range of research has investigated the exhibition of trauma across various cultures, the same expression in police work is lacking. It is important to consider cultural variation in expression of trauma because of individual variation in expression of trauma. This research explores cross-cultural examination of traumatic experiences and seeks to understand how police personnel in both countries resolve their psychological crisis or maintain resilience while working under such circumstance.

#### *Conceptualization/methodological perspectives*

While the cultural understanding to explore the psychological world of police officers could be effective, the identification on how to improve their wellbeing, and what strategies they adopt to enhance resilience might have a more relevant rather than stressing impact and consequences. It has been discovered that resilience is positively related to health and wellbeing rather than traditional approach of linking resilience with decreasing psychological concerns (NPIA, 2011). Exposure to intense situations might enhance resiliency. This is an emerging aspect of trauma studies. Resiliency literature has stressed that concept of resilience is closely alienated with health and wellness rather than pathology (Pole, Kulkarni, Bernstein, & Kaufmann, 2006; Wright & Masten, 2005). This perspective (positive psychology) is the main premise of this thesis, which integrates both positive and negative outcomes of working in traumatic situations.

#### *Global Changes perspective*

Changing global conditions such as terrorism, violence and threat are continuously challenging the trauma management capacity of police organizations. The situation seems to be worse for developing countries, which face additional socio-cultural challenges such

as ethnic clashes, poverty, lack of infrastructure etc. The developing countries face difficult situations where there is already a lack of proper equipment and resources, increased corruption, and increased terror. This concern is included in the present research.

Traumatic events in police work are quite unavoidable, expected and often come without warning or prior information. In the line of work, there are several factors which might affect an individual's capability to maintain balance and harmony during work. The growing body of literature regarding police work and psychological disturbances has shown that identifying how police personnel deal with their situation can help to assess their needs and challenges and it can assist policy makers to devise plans which address their concerns rather than imposing organisational.

### 1.3 Aims and Objectives of the study

Exposure to the negative experiences, such as death, can trigger high stress counts in the body and if unresolved, consequences can lead to various personal and professional difficulties. The purpose of this research is to explore how police officers deal with traumatic experiences by identifying challenges related to coping and resilience.

Identifying predictors to resilience and coping can have a positive impact of such strategies might help the policy makers for police welfare, to address particular areas which can particularly enhance their resiliency and stress management skills, in the time of adversity and calamity which is highly inevitable in this kind of work.

Comparing wellbeing in two police settings is relatively scarce in the scientific literature; however conducting such investigations has several benefits. According to Brough, such investigation provides the opportunities to appraise intervention outcomes, costs, and effectiveness of various plans and recommended procedures across/within occupations and countries (Brough, 2005).

Considering the fact that police work brings a plethora of psychological and emotional challenges, this research embarks upon the understanding of the cross national perception of psychological trauma in police context and attempts to uncover challenges related to coping and resilience in police personnel of the two countries (i.e., UK and Pakistan).

Main aim of the study was to understand how police officers deal with the psychological outcomes of the police work. Research objectives of the present study were to a)

understand meaning of trauma, emotional reactions and coping b) understand type of traumatic events/experiences, and c) to find out predictors to effective coping and resilience in the two countries.

To achieve these objectives, following research questions were formulated:

1. What are the types of traumatic experiences in police work?
2. What is the psychological impact of dealing with traumatic situations in police work?
3. How do police officers cope from the psychological impact of traumatic experiences?

#### 1.4 Precursors for the present research

There are several reasons to carry out this research. Firstly, the attitude of police towards public (Khan, Rehman, Shah, & Khan, 2009) which is often described as immoral, unethical and rude. Secondly, since the inclusion of a human resource division within Pakistan police force, there has been an increase in emphasis over improved performance of police officers. In this context, the police authorities have made certain measures to ensure improved performance such as by providing pick and drop service for the police officers, facility to provide food through mobile canteens while their performance is measured by annual confidential reports from supervisors. There is an increasing trend for favoured promotions on the acts of bravery or gallantry. Despite of all these measures, the police are deprived of many incentives such as insufficient leave privilege and salaries. The poor economic condition of middle class police officers provokes them to do the bribery. Although the police authorities have their check and evaluation system to monitor corruption and bribery, these efforts are not useful unless the needs and concerns of these police officers are undertaken in their own voices.

The news articles write about the ill performance of the police and often criticise over their lack of vigilance, and general confusion when they have to execute commands. Secondly the Punjab police have been criticised about their unsatisfactory performance. Such factors are underlined in more detail in the forthcoming chapter which provides detailed background of the study.

Based on the above mentioned arguments, this study has been embarked upon to explore the meaning of trauma and coping in specific cultural context. The study takes samples

from two countries with different economic situations but the same origin and seeks to investigate the meaning of trauma and support and how it contributes towards resilience and constructive coping moves. Studying this, may help in the understanding of the role of cultural factors in contributing to positive growth and resilience related constructs.

*Development of research idea: Personnel account*

The current research explores traumatic experiences of the police officers involved in the two countries i.e., Pakistan and England. This is achieved by employing a mixed method approach. It espouses a positive psychology paradigm, which argues that incorporating both psychological consequences and the identification of an effective approach to trauma management is an important aspect of understanding psychological trauma. Within the UK, the research has examined the psychological influence of exposure to trauma (Green), however studying resilience and factors to enhance effective coping is still in its embryonic phase (RAND).

The research involved pre study interviews from a) senior police officers (n = 5 from each country) and b) Occupational Health Officer (one from each country). Using grounded theory methodology, the method is used to inform the next stage of the research, which investigates the research aims/objectives on a broad sample. The pre study interviews helped to develop (and later translate) a psychometrically sound research questionnaire. This questionnaire comprised of multiple scales exploring different areas of research. The main study survey was large and it comprised of 613 police personnel (313 from England and 300 from Pakistan). Gender was not studied in detail however; estimated ratio of gender and its main affects have been included in the research findings.

The research analysis combines information from pre study interviews and the main survey. The qualitative part of the research describes how trauma experiences are perceived and how the meaning of trauma exposure helps in coping and management. The qualitative investigation also generates information regarding psychological support seeking tendency in these police personnel. The quantitative investigation provides empirical figures showing the relationship between different trauma and resilience related variables. The thesis ends by identifying challenges involved in seeking support and suggests intervention to help increase resilience.

### *Research Challenges: Cross Cultural Mixed Methodological Study*

As the research idea reshaped, the inclusion of aspects of cross-cultural examination of trauma experiences had some challenges. The foremost being how to access the gatekeepers. This process was assumed to be less challenging from Pakistan as they had shown their willingness for cooperation before this study was embarked upon.

The field observation was contrary to the researchers apprehensions. With the help of a supervisory team and quite generous cooperation from the West Yorkshire police department; the researcher had little difficulty in understanding the process to access police officers for data collection. The process was quick and smooth. In Pakistan, the researcher experienced difficulty in getting approval due to several factors. The police expressed hesitation and reluctance in formally approving the access or mainly providing personal views about their experiences, as they were extremely concerned about media criticism. The prevailing allegation on their performance in safeguarding Sri-Lankan team<sup>4</sup> (Schmidt, 2009) also contributed towards their hesitation. As a female researcher, the gender was one of the reasons why police were not openly expressive. As later in one of the survey forms, the researcher found some non-serious and absurd comments from some police staff giving sarcastic remarks about her in person (despite they did not know her other than being in a role of PhD<sup>5</sup> student and researcher). This non serious attitude combined with a lack of research tradition/familiarity in general, the police also added to the complexity of data collection.

A male research assistant was hired through proper channel (using official procedure) that had experience of working with the police and had contacts with the officials who could provide access or facilitate in data gathering process. The research assistant was qualified to distribute and collect the basic survey where little or no clarification of research aims was needed. The police authorities in Pakistan provided verbal consent for access to the study sample. The researcher carried out interviews with senior police officials before the main study. Certain challenges included obtaining access, time shortage, busy schedule of the officers on duty and interruptions while interviewing. Despite the obstacles in data access and recruitment, the police officers in both countries showed favourable response during their interviews and agreed to facilitate the researcher in every aspect of the research. The sample pool was identified during the interviews.

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<sup>4</sup> Cricket team from Sri Lanka visited Pakistan and were attacked by militants

<sup>5</sup> Degree of Philosophy, or Doctorate Degree

### *Personal reflections of the researcher*

Analysis of the pre study interviews showed that there has been little research done on disturbing event/task related circumstances in police life. In Pakistan, the researcher found that officers were highly affected by certain aspects of their work which were significant for them either because of religious affiliation or based on some humanitarian issue. The researcher also observed a similar pattern in the UK police; however they appeared to be denying being affected with the emotional strain.

This was an interesting observation and since it was the first study to be conducted on police from Pakistan, mixed methodology was selected i.e., exploring traumatic experiences and challenges involved in coping using open ended questions. This method was found to be useful in exploring personal accounts of trauma encounters and was thought to be useful in understanding what meaning and symbolization was involved in processing and expressing trauma and indigenous coping methods in both countries. Later, the researcher decided to conduct the main survey to estimate the trauma impact (by developing indigenous scales), resilience and psychological health. The researcher was interested in looking at what coping resources were being used by both forces and to what extent they were contributing towards resilience – a positive tool to combat adversity or challenges in police work. This defines the basic interest of the researcher.

### 1.5 Operational Definitions

During the recent years, the research into psychological trauma, its effects and positive growth, has increased quite considerably. While the increase in literature has broadened our general understanding of these terms, it has also led to conceptual and methodological complications and confusions. Since the trauma is a unique personal experience, it is extremely difficult to conceptualize and define universally. Similarly the way people cope in different situations depends upon a variety of factors, such as, the suitable environment, support resources, personal predisposition, understanding and meaning/interpretation of an event, and past history.

Operational definition refers to defining the concepts in the study context, and measured by the instruments specifically designed for the purpose of investigation (Denzin, 1989). The following terms were operationally defined:

### *Traumatic Situation/Experience*

In the present study, Traumatic Situation/Experience refers to any traumatic incident or experience (recent or old) which had a long lasting or significant impact on the individual. The traumatic experiences were assessed by asking participants to recall any such event and describe it. In both phases of the study, the interview method was used initially, and in a later phase, a descriptive question was added to the questionnaire.

Two counter questions were also added i.e.

1. *How was this particular event significant for you?*
2. *How do you think you could have improved?*

The last question was twofold. It made the respondent think critically about the situation and based on their inferences, they could critically examine their role and performance.

### *Psychological Impact*

In the present research, the psychological impact refers to the degree of psychological damage the event may have on the person's everyday functioning. Psychological Impact may be manifested in the form of response and reaction to a trauma. The difference between response and reaction is essential. The trauma reaction would be sudden with no thoughtful strategy or technique employed. The response to experiencing such a reaction would be manifested emotionally (Emotional Control or Sensitivity), psychologically (mental disturbances or positive mental health) or behaviourally (attitude and behaviour). The psychological response to handling trauma may be reflected in an officer's performance. This aspect was measured in two ways: a) by asking respondents to narrate how they managed the psychological impact, b) using a list of traumatic incidents (as informed by the interview phase). The participants were requested to rate these items in terms of their frequency of occurrence and severity of impact. A Likert rating scale was used.

### *Psychological/Mental Health*

Original and translated versions of the General Health Questionnaire (GHQ) 12 (D. Goldberg & Williams, 2006) were used as an index of Psychological Health. Quite a number of researchers have used this as a measure of psychological health (Khan, Ullah,

Azam, & Khan., 2010). The negative items were reverse scored. A study utilising the GHQ to measure positive mental health has indicated strong reliability (Banks et al., 2011).

### *Psychological Resilience*

Original and translated versions of Resilience was measured by Connor Davidson Resilience Scale CDRS -10 (Campbell-Sills & Stein, 2007) version . It has been extensively used to assess the ability of people to rebound (Chang, Connor, Lai, Lee, & Davidson, 2005; KaraIrmak, 2010b). It has also been used previously with rescue officers (Chang et al., 2003).

### *Emotional Channelisation Sub-scales*

This section includes various subscales which assess various methods of dealing with critical situations. The scale was specifically designed from interviews, which reflect internal and external resources in major crisis. Researchers have previously used various indexes such as coping inventories (DePrince, Zurbriggen, Chu, & Smart, 2010; Hooper, Stockton, Krupnick, & Green, 2011), checklists etc. This is an indigenous way of measuring various sources including the domains such as Religiosity, Seeking Support, Spending time with family, Emotional Control, Showing Sympathy, Overwork, Managing Stress, Training, and Debriefing.

### *Personal Resources*

Personal resources include personality traits such as assertiveness, resilience; belief and faith, self-help skills. In this research, the scales measuring personal resources focused on traits such as to avoid, acknowledge, sympathise, discuss, seeking help from support groups and seeking organisational support. These scales are discussed in detail in chapter five.

## 1.6 Ethical Considerations in choosing research design

Investigators have the responsibility to conduct useful and scientifically sound clinical research, in a manner that is respectful of the dignity, autonomy, and welfare of research participants. In the present study, a mixed methods approach was followed where, the interviews informed the researcher in formulating a survey to assess empirically the association between trauma variables and health related outcomes. Ethically, such an approach is gaining popularity because it considers participant's benevolence and

confidentiality and adopting such an approach may provide in depth and rich information which can be coded etc. the ethical considerations are detailed in the methodology chapter (see chapter five).

### 1.7 Importance and Scope of the study

There are certain issues in police work, which have received some attention. These include stress in policing, police personality, dynamics of family work relations, and most importantly mental health issues in police work. This thesis seeks to examine literature on psychological issues related to police work along with the positive growth following such encounters. What follows is an attempt to understand the exhibition of emotional reaction and coping approaches. The goal for the present study is to gain a better understanding of the impact of traumatic experiences on police personnel's behaviour in various critical situations. Identifying constructive behaviours in dealing with traumatic situations can help police personnel to increase their psychological robustness. This study leads to suggest some psychological assessment approaches, which can aid police organisation (and others) to improve mental wellbeing of their personnel at work. Furthermore, this research will increase understanding about the issues within police work in a cultural context which can provide another perspective to complement existing psychological description on police work. Policy implications include policies and practices to reduce the perception the agency does not care about its employees and increase employee participation in decisions that affect them.

### 1.8 Summary of Chapters

#### *Chapter 2: Cross Cultural Context of Police Work*

Chapter two describes the cultural context of police force and its impact on resiliency. The argument raised here is that the police force is a huge institution with several subsystems. In order to understand how a police officer confronts challenges within and outside the organization needs consideration of the subsystems involved in it. Resilience is an outcome of complex arrangement of the subsystems and the inter relation between them. For example, police role is specific in terms of how to react and behave to aggression, threat or the emotional triggers. Similarly, the police's public image, the organisational roles and relations, the power imbalance between ordinates and subordinates, the community, personal family life, the government and global context appear to influence

psychological reactions while confronting trauma. These subsystems comprise a police organization whose behaviour, reaction or response is widely determined by how intact the connections are between these subsystems. The cross-cultural explanation of police culture, performance pressures, challenges and threats are discussed in the social context of coping in adversity. This chapter begins by introducing police organisation and structure in both countries, discussing the police role, perception and expectations. It moves forward by describing the various components of “police system” inter relating to how a general response to adverse stimuli is generated at operational and personal level.

### *Chapter 3: Critical Literature Review*

This chapter provides an ecological perspective of resilience in a police setting. It summarises the current knowledge about trauma experiences in police work and how it influences resilience and response and adaptation to the adversity (or trauma). It explores existing knowledge and understanding about a) causes and effects of working in trauma situations with reference to police work, b) how the police personnel deal with the psychological effects of trauma.

### *Chapter 4 and 6: Theoretical and Conceptual frameworks*

It entails an introduction to cause and effects of psychological trauma in the work place as described by well-known researchers in the field. It then relates the police work with coping and emotional strength thus furthering knowledge and understanding about coping capabilities and their role in facilitating resilience. The context of cultural influence in coping is also discussed. Further to that, the chapter establishes conceptual understanding about trauma in police work, its psychological manifestation (emotional reactions), and response. The chapter begins with an exploration of various psychological theories that help to explain human behaviour in response to coping from trauma situations. The chapter also discusses theoretical accounts of process and the mechanism involved in coping with trauma in work involving trauma exposure. Perspectives from significant health psychological paradigms such as Information processing theory, cognitive behavioural theory, psychodynamic, self-construct theories (personality) have been detailed to provide a triangulated view of coping with trauma. It also critically examines the methodological fallacies in each and in the end provides holistic approach which then was used in this study, as a theoretical lens to interpret and understand findings. In the end, the chapter concludes by offering a conceptual understanding about trauma, exposure and coping

capabilities in cultural context. This leads to the research questions and a discussion of how they will be answered.

*Chapter 4: Methods and Methodology*

This chapter elaborates methodological approaches to answer research questions. It begins with explaining methodological (theoretical) framework. The rationale for combining mixed methodology with grounded theory methodology has been justified with corroboration of various researches. The chapter introduces methodological design, approaching participants for each research stage and progression towards development of tools. It continues by outlining the methods used to collect data in pre- pilot and main study phases. The ethical implications are outlined, focussing on participant anonymity, secondary sources and informed consent.

Table 1-2: Outline of the thesis

<i>Chapter</i>	<i>Objective</i>
Chapter 2: Research Background: Cross Cultural Context of trauma in Police work	Rationale
Chapter 3: Trauma Response, Risk and Protective Factors towards health related outcomes focusing on resilience.	Literature Review
Chapter 4: Theories about coping and dealing with trauma: CSDT	Theoretical Framework
Chapter 5: Methods and Methodology	Methodological Framework
Chapter 6: Pre Study Interviews	Development of Conceptual Framework
Chapter 7: Results Part one: Resilience	Quantitative Analysis
Chapter 8: Results Part two: Trauma Dimensions	Qualitative Analysis
Chapter 9: Conceptual Model	TMP Model
Chapter 10: Discussion and Conclusion	

*Chapter 7-8: Main findings*

Main findings of the study are divided into two chapters. Chapter seven provides statistical results exploring the relationship and comparisons between several research variables. Chapter eight details the quantitative information and answers research questions related to trauma experiences. This chapter identifies key trauma management in both countries.

### *Chapter 9: Conceptual Model*

Using path analysis as a method of testing the research model, this chapter will provide the conceptual framework to understand resilience in police personnel resulting from the research findings. It will compare the model with existing theoretical models such as CSDT. It then identifies applications of this model for both police and other emergency work organisations.

### *Chapter 10: Discussion and Conclusion*

The results presented in earlier chapters will be analysed and discussed in this chapter. The findings will be compared and justified with earlier findings. This chapter also provides a conclusion to the findings. It gives intervention based on the developed theoretical model and suggests recommendations to improve resilience and mental health of police personnel. Wide range implications of the research study are mentioned along with highlighting limitations and prospects for future studies.

## 2 TRAUMA IN POLICE WORK: CROSS CULTURAL CONTEXT

### 2.1 Introduction

This chapter provides comparison of the British and Pakistani police force in terms of the nature of trauma, police roles and challenges and issues in terms of coping from psychological issues arising from work experiences. The chapter also aims to gain a better understanding about police in Pakistan and England. It includes a discussion about structural and organisational similarity between the two forces that extends to major reforms and initiatives for welfare of the police officers given the country's grim terrorism related situations. The chapter identifies arrangements for psychological support, cultural perceptions and organisational challenges. It begins by describing the general police work and relates it to the current situation in Pakistan and England. It provides introduction to police work indicating what type of operational and desk based duties are involved in both countries. It also gives the context of current scenarios of terrorism and how it is impacting police departments in particular. The discussion extends towards determining a psychological debriefing process in both countries and tries to look at how trauma management is seen culturally and in an Organisational context.

### 2.2 Role of Police

It is interesting to note why the police are the main institute in the present study. There are several reasons for selecting the police as the primary organisation under investigation. Firstly, the increase in violence worldwide has increased and modified the responsibility of police officers, thereby the stress and stressors have been modified as well. Arguing on the changing nature of world events the moderated assessment of the psychological health of police personnel is highly essential to ensure that we have mentally fit individuals to protect us.

Secondly, referring to Pakistan, there has been no research to assess psychological wellbeing despite an aggravating need for doing so. Several recent incidents have highlighted this need. Moreover, the escalating pressure from inside and outside the organization needs to be evaluated to ensure the aims and objectives of police as an organization are being met.

*Violence against Violence: Some news stories*

A pictorial view of the pictures captured at different occasions is displayed in this section. It is to be noticed that most of the violent crowds involve use of harmful gaseous substances putting the lives at risk. The following images indicate various aspects of police confrontations with public or disasters and provide a glimpse of nature of challenges faced by these officers.



Figure 2-1: Source: BBC<sup>6</sup>

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<sup>6</sup> Lawyers across Pakistan have boycotted courts and taken part in rallies - some resulting in violent clashes with police - in protest at the suspension of the country's top judge. Monday, 12 March 2007, 16:31 GMT



Figure 2-27: Source 2007 (ABC news)



Figure 2-3: Blast 2008 Source: Metro.co.uk

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<sup>7</sup> Pakistani police wielding batons and firing tear gas clashed with lawyers and activists opposed to President Pervez Musharraf, as the Election Commission accepted his nomination for an October 6 vote.



Figure 2-4: The G20 protests, England



Figure 2-5: Mail online: 2009 California

### 2.3 Dealing with the trauma

It is unsurprising that the police work will contribute some extent of trauma in the person involved whether it is participating in an event (Addis & Stephens, 2008) or witnessing a situation (Bernard-Donals, 2009), or performing tasks which are stressful (Anshel, 2000). The job of the police officer is stress driven and they are expected to be emotionally strong and psychologically equipped to handle the sensitivity of the work related psychological pressures (Brandl & Stroshine, 2012). The selection procedures of the police partially reflect this aim, where a great deal of attention is rendered on examining the resiliency and the ability of these officers to cope with challenging situations. The police in Pakistan have an organisational similarity to that of British police in certain aspects (Malik, 2009; Salman, 2012). This includes Organisational construction, ranking and certain operational duties and the police culture (Abbas, 2007). Interestingly, critiques suggest that the Pakistani police system inherited its culture from the British rule (Dwivedi, 2009) whereas the British police did not feel it necessary to prolong such a traditional approach of controlling people. British police systems underwent drastic and functional reforms while in comparison, Pakistani police had irregular reforms (especially after the Police Order 2010) and after the police order, these reformations are still undergoing change.

### 2.4 Comparison between British and Pakistani Police

It sounds relevant to cite the comparative historical emergence of police systems in both Pakistan and England. It helps to understand the diffusion of the old traditional system into the modern day policing. Historical evidences indicate that the Justice of the Peace act (1361) served as the first steps in policing in Britain where three or four men were appointed to 'arrest, take and chastise' offenders (Hostettler, 2009). This also suggests that since the beginning the police force has been traditionally oriented to arrest crime suspects.

Police officers are actively engaged in performing various types of tasks such as paper work, management duties, operational duties (such as patrolling and crime investigations), forensic analysis etc. As part of their job, they have to deal with difficult life changing events or experiences. The death of a close colleague on duty, serious accident, terrorist attacks on public places resulting in massive deaths, and several other traumatic events are examples of the many challenging life experiences involved in police work (Weiss, et al., 2010).

Paton suggests that police personnel generally adapt and cope with these stressful conditions over a period of time (Paton, 2009). The question about what helps these personnel to deal with adversity still remains. The most important factor might be resilience i.e., an “on-going” process that requires time and effort to engage in taking a number of steps towards improvement. This chapter is intended to help understand how police personnel manage their resilience. The information contained in this chapter focuses on resilience and factors, which effect how personnel deal with difficult situations.

Each police organisation aims at producing stronger, emotionally well-equipped officers who can meet the demands placed by the Job (White & Heslop, 2012). There are two possibilities when a police officer encounters unpleasant and distressing situations. Either he/she comes out emotionally stronger or they can be overwhelmed with guilt, anger, doubt, anxiety and depression. These outcomes of a traumatic situation may depend upon several factors, such as departmental policy/support, media involvement, psychological support resources, previous training, work experience, and on-going life problems (such as financial, marital or health issues). In these circumstances, resilience plays a vital role in avoiding going in the loop of psychological difficulties. Resilience is like a backbone for a police force where the psychological impacts of dealing with adverse situations is well apprehended and most expected.

What police organisations or personnel can do is to enrich their emotional competence and personal tendencies towards raising their own awareness and allowing themselves to emerge more strongly after each incident or experience. Understanding resilience in police personnel gives better understanding about how to develop ways to promote competence in more vulnerable groups within police (such as those with weaker emotional competence).

## 2.5 Organisational Characteristic of the Pakistan Police (Punjab police)

Police organisation in Pakistan is a dynamic environment where the work related pressures, problems with the policing, law and order situations within the country constantly challenge the police response (Abbas, 2009). In addition to the fact that Pakistan police is under resourced, the psychological effects emerging from high volatile work situations is not recognised. As mentioned earlier, the professional and personal difficulties arising from the work related traumas are not well understood by Pakistan police. Unlike Britain, the Law and Order situation in Pakistan is quite different, and therefore trauma related concerns are also different and indigenious. Like any other police

force, Pakistan police are beginning to recognise the need to improve efficiency to meet growing demands of work.

Ironically, the performance of police personnel and origin of their difficulties has been associated with money related issues such as financial difficulties (Abbas, 2011). Police therefore understand that by improving the salary structure and rewarding personnel (who perform well) with money prizes, the police will be more satisfied, motivated and engaged in fighting crime (Suddle, 2003). They will be less corrupt and more honest with their profession<sup>8</sup>. The dominant conceptualisation of police in Pakistan as being inefficient has undermined the fact that the police are putting all its efforts into surviving in such under resourced environments (Abbas, 2005; Traub, 2009). It is quite encouraging that despite all odds, the police personnel are still resisting the threats (of terrorism) and sustaining psychological injuries (Bhutto, 1968). Police have bravely confronted several terrorist attempts, as several police personnel have been injured or killed in the line of duty depicting that they can still fight and survive! It is, however, ironical that the needs and work related challenges of personnel have never been understood by their own point of views. Their voices about concerns become recessive (unheard) due to organisational and political interests.

The police force in Pakistan has a long history of facing adversities. It started with mass migration of millions of people during the partition of the Indian Subcontinent, later followed by dacoits and looting during the fifties till now when they have to deal with terrorism related threats (Abbas, 2009). The Punjab police have been facing these challenges with spirit and determination (as seen in their reaction to handling blasts) however since the terrorist attacks the performance has been declining consistently (Lee et al., 2010). There is a general shortfall in police numbers and most of the officers/staff are demoralised and dissatisfied with the job. In coming age, there have been instances which have reflected risk and vulnerability.

With growing challenges of terrorism, poor infrastructure to fight with increased crime and corruption, police all over Pakistan are subjected to criticism for ill performance and poor management.

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<sup>8</sup> Police in Pakistan is well blamed for its corruption. For details on this aspect please refer to the work of Hassan Abbas

Table 2-1: Number of Police Stations in Pakistan in 2008 (Abbas, 2011)

Province	Police Stations Count
Punjab	637
Sindh	440
Khayber Pakhtoonkhwa	218
Baluchistan	84
Islamabad	13
Total	1392

*The Punjab police*

The Punjab Police operate in the biggest province of Pakistan i.e., Punjab which comprises of 34 districts and 122 Tehsils<sup>9</sup> (See Map 2-7). The Tehsils in each district are varying and depend upon the area of an individual district. According to the 1998 census, around 72 million people reside in this province (Asghar, Tufail, Khan, & Mahmood, 2010). The Punjab police forces in Pakistan are nearly 170,031 in strength while the allocated budget in the year 2009-10 was around Rs. 43,000.00 (Abbas, 2011; Shera et al., 2010).

In the midst of scant resources, police have been struggling to achieve expected professional goals. Knowing the impact of dealing in such situations and challenges, the consideration of health and fitness of police personnel appears to be lacking and is only restricted to recruitment process in Pakistan police where potential candidates are screened on the basis of their physical health, efficiency and other performance tasks. After selection or recruitment, there is no evidence to indicate whether there is any assurance of their mental integrity or wellbeing.

<sup>9</sup> Sub District/ Sub posts



Figure 2-6: Map of Pakistan

The recruits of the Punjab police are subjected to extensive content based training (Fasihuddin, 2009a) which is not beneficial in the long run. The selection of upper and lower ranks is also quite different i.e., officers from upper ranks are selected by an independent body which ensures that resilient, efficient and only the finest candidates are selected. The senior police personnel are selected on the basis of an extensive, highly reputable FPSC<sup>10</sup> exam. The lower rank police personnel are required to have a minimum of tenth grade education (according to Pakistani school system). Psychological screening is only subjected to the selection of higher ranks. Lower rank officers who are exposed to a larger number of terrorist attacks are never screened for psychological fitness (Fasihuddin, 2009a). There is an alarming increase in the rate of crime, terror and threat to personal safety. It is important for the organisation to consider routine mental health examination of its officers who are extensively involved in traumatic incidents. Unfortunately the present police in Pakistan lack any such understanding of need.

<sup>10</sup> Federal Public Service Commission, Pakistan

Table 2-2: Pakistan Police Strength (2009-10)

Provinces (2009-10)	Sanctioned Strength
Punjab Police	170,031
Sindh Police	70,133
Khyber Pakhtunkhwa Police	52,650
Baluchistan Police	324, 933

### *Functioning of the police*

The Pakistan police force consists of two primary branches i.e., operational wing and investigational wing (see appendix E). In order to file a complaint (FIR), the complainant approaches the operational branch that is supervised by the Station House Officer (SHO). This complainant is mostly a civilian who initially avoids going to the police because of their ill treatment / behaviour. However if a person who understands the mechanism of the police manages to register his/her case, s/he is then at the mercy of the investigation wing. They even threaten the complainant in the case of minor offences like theft, robbery.

### *Minor Offences*

Normally minor offences are addressed in police stations on the wishes of politicians / notables who lodge such complaints or head such complaints. Police would make a challan<sup>11</sup> of the offence for onward submission to the court. Once a First Information Report (FIR) is lodged / registered, it is either dismissed or further processed by the concerned court.

### *Major offences*

Some of the offences included in the category of a major offence include kidnapping, murder or rape. Such offences require a strong evidence or proof to reach justice. In Pakistan, the police are politically blackmailed (Abbas, 2009) and despite of the delicacy and intricacy of the crime, the criminals are not caught or executed to the punishment. Such discrepancies in the laws and their execution can be a source of guilt for those police officers who work with honesty and principles (Abbas, 2011).

<sup>11</sup> Police warning notice

### *Condition of terror attacks on Police and other security forces*

Various untoward incidents such as bomb explosions in public places, religious extremism and dogmatism is the cause of volatile law and order situation in the country and it is adding to the frustration and uncertainty in police whose prime responsibility is to provide safety and protect citizens from any sort of harm. The crime rate is on a steady rise since the new police reforms were introduced in 2002 (Fasihuddin, 2011).

Every year around 400 police personnel are killed in terror attacks only since 2005 (Ali, 2010). The situation gets worse when these personnel are under resourced and fear their own protection (Abbas, 2011). In one informal interview with senior police, it was reported that death itself might not be a demoralising factor, but the terror attacks and lack of management support for police welfare demoralises the whole staff who are already less equipped to combat (Abbas, 2008).

### *Violence in Pakistan*

Violence in Pakistan has increased considerably since 2003. An estimate figure shows that there were 3443 fatalities in terrorism violence on security forces. The following table presents the number of killings during 2003 to 2011. As shown, a large number of security personnel and civilian were killed during 2009.

Table 2-3: Fatalities in terrorism (Feb 2011)

Year	Civilians	Security Forces (SFs)	Terrorists	Total
2003	140	24	25	189
2004	435	184	244	863
2005	430	81	137	648
2006	608	325	538	1471
2007	1523	597	1479	3599
2008	2155	654	3906	6715
2009	2307	1011	8267	11585
2010	1796	469	5170	7435
2011	226	98	384	708
Total	9620	3443	20150	33213

Federally Administered Tribal Area (FATA), Pakistan has been the prime victim of these terror attacks.

Table 2-4: Killings due to terrorist attacks 2009-10

Province	2009				2010			
	Civilians	SFs	Terrorists	Total	Civilians	SFs	Terrorists	Total
Baluchistan	152	88	37	277	274	59	14	347
KP	1229	471	3797	5497	597	94	511	1202
FATA	636	350	4318	5304	542	262	4604	5408
Punjab	293	97	51	441	272	28	16	316
Sindh	49	3	14	66	111	26	25	162
Total	2359	1009	8217	11585	1796	469	5170	7435

Figures indicate that around 1009 fatalities are contributed to the security forces (SFs) including mainly army and police in the year 2009.

#### *Law and Order Situation in Pakistan*

The law and order situation in Pakistan is a growing challenge and poor economic conditions and political instability add to the increased vulnerability towards psychological harm. For example, the Police in Pakistan work in circumstances where the crime problems are rather acute and challenging problems such as understaffed personnel, lack of resources and other problems are increasing. Looking at the rapid increase in crime rate between 2005- 2006 alone explains the law and order situation and challenges for the law enforcement agencies (Ali , et al., 2011).

#### *Crime Statistics in Pakistan*

According to a resource, the following figures represent an increase in crime rates during 2005-2006:

“As many as 537866 cases were registered in the country during 2006 as compared to 447745 cases recorded during 2005 thereby showing an increase of 90111 (20.1%) cases. Punjab registered a rise of 66306 (24%) cases, Sindh 10520 (22.2%) cases; NWFP 11612 (11.2%) cases, Baluchistan 1137 (16.9%) cases, Islamabad 556 (14.7%) cases and AJK 376 (7.9%) cases. However, there was a decrease of 159 (5.5%) cases recorded by Railways police, and 237 (12.8%) cases in Northern Areas.

- **Murder:** showed a rise of 266 (2.7%) cases in the country including 22 (0.4%) cases in Punjab; 151 (8.2%) cases in Sindh; 50 (2.3%) cases in NWFP; 34 (11.7%) cases in Baluchistan and 38 (48.7%) cases in AJK while there was a decrease of 34 (26.8%) cases in Northern Areas.
- **Attempt to Murder:** rose by 691 (5.3%) cases in the country; 371 (5.2%) cases in Punjab; 143 (5.9%) cases in Sindh; 102 (3.9%) cases in NWFP; 64 (22.1%) cases in Baluchistan; 31 (29.2%) cases in Islamabad and 32 (9.3%) cases in AJK while there occurred a decrease of 59 (42.1 %) cases in Northern Areas.
- **Rioting:** showed a rise of 710 (22.4%) cases in the country including 30 (19.7%) cases in Punjab; 486 (21.5%) cases in Sindh; 93 (30.2%) cases in Baluchistan and 126 (40.5%) cases in AJK while there was a fall of 22 (23.4%) cases in Northern Areas.

- **Assault on Public Servants:** increased by 700 (21%) cases in the country including 235 (19.1%) cases in Punjab; 409 (31.1%) cases in Sindh; 21 (5.9%) cases in NWFP; 8 (5.4%) cases in Baluchistan and 45 (42.1%) cases in AJK while there occurred a decrease of 10 (10.6%) cases in Northern Areas.
- **Zina (Adultery):** crime recorded under this head rose by 116 (5.8%) cases in the country; 80 (5.7%) cases in Punjab; 60 (30.8%) cases in Sindh and 11 (15.3%) cases in Islamabad while there was a fall of 13 (19.7%) cases in Baluchistan and 14 (66.7%) cases in Northern Areas.
- **Kidnapping/Abduction:** showed an increase of 1320 (15%) cases in the country; 1052 (15.3%) cases in Punjab; 98 (7.7%) cases in Sindh; 52 (11.5%) cases in NWFP; 53 (59.6%) cases in Baluchistan; 8 (72.7%) cases in Islamabad. 12 (100%) in Northern Areas and 50 (44.6%) cases in AJK.
- **Kidnapping for Ransom:** rose by 70 (32.3%) cases in the country including 23 (20.5%) cases in Punjab; 23 (36.5%) cases in Sindh; 21 (77.8%) cases in NWFP and 4 (50%) cases in Baluchistan.
- **Suicide:** showed a rise of 24 (14.6%) cases in the country. There was an increase of 9 (225%) cases in Punjab and 15(11.1%) cases in Sindh.
- **Highway Dacoits:** increased by 20 (21.3%) cases in the country. There was an increase of 12 (54.5%) cases in Sindh and 8 (100%) cases in Baluchistan.
- **Other Dacoits:** increased by 478 (21.1%) cases in the country including 247 (16.7%) cases in Punjab; 207 (30.1%) cases in Sindh; 22 (78.6%) cases in Baluchistan and 12 (100%) cases in Islamabad.
- **Highway Robbery:** rose by 63 (41.2%) cases in the country; 43 (34.4%) cases in Punjab; 10 (76.9%) cases in Sindh and 10 cases in NWFP.
- **Other Robbery:** showed a rise of 2411 (19.7%) cases in the country; 1640 (18.7%) cases in Punjab; 722 (23.8%) cases in Sindh and 70 (89.7%) cases in Islamabad while there occurred a decrease of 16 (11.9%) cases in NWFP and 7(11.5%) cases in AJK.
- **Motor Vehicle Theft/Snatching:** increased by 3056 (18.7%) cases in the country including 1587 (16.6%) cases in Punjab; 1107 (20.9%) cases in Sindh; 64 (12.6%) cases in NWFP; 181 (41%) cases in Baluchistan; 93 (22.9%) cases in Islamabad; 11 (57.9%) cases in Northern Areas and 9 (10.2%) cases in AJK.”

(Bureau, 2006, pp. 8-9)

The law and order situation has become worse since the 9/11 attacks and invasion of US/NATO force into Afghanistan which killed the Taliban concentration in the area. As a result, a spill over of Taliban from Afghanistan into Pakistan’s tribal territory has caused immense threat to internal and external security of Pakistan. The cascade of suicide attacks and terrorist activities have literally paralysed the local administration, such as police.

### *The police to population ratio*

There are a total of 210,000 law enforcement and intelligence agency personnel in Pakistan (Abbas, 2011). With a total population of around 180 million the police-population ratio is 304 to 1 as compared to India (794-1)<sup>12</sup> and UN (400 -1). Apparently

<sup>12</sup> Source: Press Information Bureau, Government of India

the population to police ratio is not very different but conditions such as increase threat of terrorism and lack of adequate equipment and lack of staff makes it challenging and difficult to cope. Compared to increased crime rate, the resources to fight are very limited.

Punjab province has the country's biggest police force. Almost 85% of police population are constables and head constables who interact most with the public. The police are reported to have almost 82000 weapons and only 5000 bullet proof vests. This indicates that the safety of police personnel is compromised. Training programs do not incorporate how to deal with life threatening situations and do not appear to focus on mental wellbeing. The focus instead is on improving efficient response and doing drill exercises (Suddle, 2003).

Anecdotal evidences gathered from various news reports bring forward the voices of police staff to show their frustration and anger over the inability to fight. For example a police constable released the following to a local newspaper:

"These people (terrorists) are among us. Look here: Our technical capabilities are so weak that we don't even have the ability to listen or to trace these phone calls," he said. "How are we supposed to know who it is that is coming here to kill us and when?"

(Press, 2008a)

These kinds of incidents and lack of support are a big challenge towards resilience. Most of Pakistan's 383,000 police are poorly paid constables whilst working in the world's most dangerous sites is difficult enough.

"Insurgents can see when I go someplace and wait for me to return and kill me," he said. "It isn't my own death that I fear, but every time there is an attack, it demoralizes the whole police force."

(Press, 2008a)

#### *Lack of proper equipment*

The lack of equipment is another factor to demoralise them when in danger. Encouragingly, the Punjab police have taken quite a few steps to determine the psychological state of its officers (Punjab Police, 2011) but again the motive of such an effort is purely organisational and the personal needs of its staff are often not appreciated.

#### *Transport Facilities for Punjab Police (date record unavailable)*

As it can be seen from the tables below, the logistic support is not sufficient enough to meet demands and duties.

Table 2-5: Transport facilities, Punjab Police Pakistan

Kinds of Vehicle	On Road	Off Road	Total
Troop Carrier	44	05	49
Truck + Water Tank	12	—	12
Jeeps	20	—	20
Pick-ups	38	02	40
Shahzoor Pick-ups <sup>13</sup>	10	—	10
Ambulance	01	—	01
Car	03	—	03
Motorcycle	22	04	26
Total	150	11	161

Source: (Bureau, 2006)

## 2.6 Organisational Characteristics of British Police

The British police takes its law and enforcement foundation in 1829 with the Metropolitan police bill presented by Sir Robert Peel. At that time, the police officers were known as “peelers” (peel’s boys) or “bobbies”. Sir Robert Peel (Ramsay, 1928) introduced several revolutionary changes to the British police constabulary. For the purpose of present research, West Yorkshire area was selected for convenience and approachability of police officers. The following section details information about the WYP focusing on its structural and organisational similarities to Pakistani (Punjab) police.



Figure 2-7: Map of West Yorkshire Region

<sup>13</sup> Specific vehicles for transporting goods

Amongst the several other counties, the West Yorkshire police serve around 2.2 million people in five metropolitan districts including almost 5,400 police officers and 4,000 staff in the West Yorkshire region. Therefore, the WYP is referred to as England's fourth largest force (Police, 2012a).

According to the local police authorities, the current number of police officers in West Yorkshire is 5,567. Following is the breakdown of police officers serving in the Kirklees region.

Table 2-6: Police numbers according to Ranks and Gender in WYP (West Yorkshire Police)

Police Rank	Number of Male Police Officers	Number of Female Police Officers
Police Constable	4,485	1,396
Sergeant	811	169
Inspector	284	48
Chief Inspector	75	17
Superintendent	39	3
Chief Superintendent	17	2
Assistant Chief Constable	4	--
Deputy Chief Constable	1	--
Chief Constable	1	--

Source: West Yorkshire Police Official Website

## 2.7 Challenges towards resilience in the British Police

The British police force is also facing increased concerns towards improving resilience mostly because after police cuts, the increased shift hours and other complaints are resulting towards increase in sick leaves or absentees. Some of the issues are discussed as follows:

### *Issue of Sick Leaves and restricted duties*

Statistical data indicates that there has been a disquieting increase in sickness leaves in the UK police force. According to a BBC report, nearly one in ten police officers in England and Wales is on sick leave or restricted duties according to a local newspaper resource The Times (BBC, 2010). The paper stated that 9,500 police officers are on restricted duty. Of those 3,492 have been on sick leave and are being gradually reintroduced to full duties.

The rise in sick leave is one of the indicators of increased work pressure and the need to understand the hazardous nature of the work before planning for health care plans.

Several factors were related to why an increasing number of officers are on sick leave. Some of the reasons included lack of motivation, work pressure, administrative problems, and low morale within the team. Although police authorities are trying to devise a policy related with special leave which would assist in coping, the increase in sick leave is still a rising question.

#### *The PTSD research and UK police*

According to the local newspaper resources, one in every four senior police officers suffer from depression (Cockcroft,2009). Robinson (as cited in (Green, 2004) found the prevalence of a consultant psychiatrist in Greater Manchester, UK carried out an investigation to explore post-traumatic stress disorder PTSD (one of the psychological consequences of police work) in 2004. This study showed that police were significantly more likely to acquire PTSD as a result of direct assault or from being threatened with death by guns, knives or swords.

News resources also show that around half of UK police express stress and anxiety associated with their work. The main stressors are working long hours and bullying at the workplace (Green, 2004).

#### *The British Police: Psychological Issues and Challenges*

reats are no different in the UK. The G 20<sup>14</sup> riots reminded the officials to question the mental integrity and issues related to police behaviour. Several attempts have been made by the UK police administration to research and identify factors causing PTSD and other difficulties. The investigation into what cross-cultural factors helps them to cope, and identify what challenges are involved is still an area for furthering understanding.

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<sup>14</sup> Protests held in Central London dated: 01 April 2009.

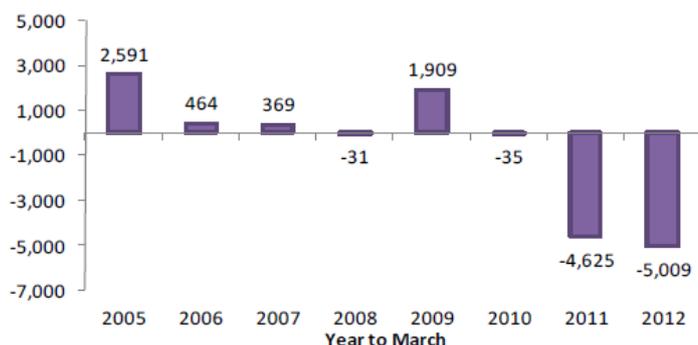


Figure 2-8: Police Strength 2012 (Source: Home Office Statistics)

## 2.8 The Cultural Aspects of studying resilience in police forces

Due to increased sensitisation about possible psychological damage to personnel working in traumatic situations, it is quite surprising that there is no indication of management of such issues in the Pakistan police force. It is a well-established fact that they need to care for the wellbeing of their officers in order to have an efficient performance.

Every major police force in Britain as well as Pakistan has problems with their sickness rate and decline in police numbers, which is mostly attributable to stress-related problems. Although the primary role of police is to control, and safeguard the community from crime, changing global situations have resulted in a reformed police system today which is better equipped and resistant.

Previous studies, mainly by the police organisations have centred their focus on investigating a variety of aspects relating to the psychological aspects of occupational health. The police departments worldwide are working hard to devise plans to improve resilience considering high sickness and absenteeism rates. The West Yorkshire police force in the UK, for example has an occupational health unit, which realizes the sensitivity involved in police work and its psychological/physical affects and is consistently trying to devise programs for capacity building and resilience training. These types of intervention plans whose prime focus is the psychological wellbeing of the officers, is completely lacking in developing countries such as Pakistan.

The police in Britain and in most of the developed countries such as America and Australia have a well-established welfare support system and monitoring system where they keep a check on its officer's performance (and wellbeing). The Central Scotland Police Force,

(Summerfield, 2011), for example, has an independent welfare officer who aims at working to reduce the sickness levels of police personnel. Similarly, the West Yorkshire police (the current study sample) also have an occupational health unit which provides Occupational Health Safety and Welfare (OHSW) service to its officers who need support for health related concerns (Constable, 2011). In Pakistan, however, there is no apparent welfare system to address the occupation health related issues. Unlike police, the Pakistan army has a well-established Army Welfare Trust (AWT) (Siddicja, 2005) which looks after its employees (and ex-employees) regarding their welfare issues. The government of Pakistan has introduced “Shuhada Package” (Punjab Police, 2011) for its police and has also increased salaries and allowances. According to this package, family of the police personnel killed in the line of duty would get Rupees 500,000 (around £ 4000), which now has been raised to Rs 3 million. Similarly, facilities of free education to children of killed police officers, residence and payment of salaries till retirement age were also offered under this package. All these initiatives are post incident and there is little evidence to indicate that in service management this is well placed.

A short survey conducted in Peshawar, Pakistan recruited 60 police personnel from various ranks and duties and asked them to identify challenges to present police system in Pakistan. A majority rated terrorism as an increasing challenge (22%), while having inadequate training facilities was seen as a large constraint towards maintaining resiliency (14%). This survey suggested that the present police in Pakistan were more vigorous and through analysis of the training system a need to incorporate psychological analysis of trainees was suggested (Fasihuddin, 2009a).

Randhir Singh Ranta (2009) argued that a stressed police officer is not only a threat to themselves, but also towards their own colleagues, offenders and the general public. He carried out a study to investigate how police personnel in India are coping under the given conditions (Ranta, 2009).

The police officers in Pakistan are involved in a variety of duties ranging from patrolling, drilling etc. This study is concerned with factors that promote resilience and coping in context of a vulnerable work climate in the police of England and Pakistan. It further examines cross cultural manifestation of trauma experiences, thereby identifying commonalities and differences involved in trauma exhibition and coping. Such an understanding might help to reveal factors that promote resilience and mental health while

working in an upsetting work environment. The implications of this study are wide. The findings have wide implications in that the British police force comprises of multiple ethnicity police, a large number being British Pakistanis. The cultural aspects of coping and challenges might help the respective police organisations to revisit their welfare programs and reform changes for betterment of police as individuals.

Equally important is the need for realisation that unless the police and government authorities look after the welfare and wellbeing of its personnel, the several socioeconomic factors such as inflation and financial constraints and political scenario (unstable governments) are some of the various factors contributing towards police stress in the workplace (Lucas, Weidner, & Janisse, 2012). It is not only the developing countries which are endangered by terrorist attacks, increase violence, increased frustration and corruption. All these influence the resilience and capability of police personnel to keep confronting their day to day trauma encounters, which are of course, inevitable.

Not only are logistics an issue for Pakistan police, an increasing number of personnel are leaving the job due to insecurity of their own safety (Kronstadt, 2010). It is an increasing concern in Pakistani police, which is less recognised by the relevant authorities who appear to be more concerned about the performance of its officers, rather than ensuring if their own wellbeing is optimal. This sort of negligence has led to officers feeling insecure and demoralized with their on-going job duties and requirements. Their behaviour and dealing with community affairs reflects how much distrust they have with their job (Hall, Dollard, Tuckey, Winefield, & Thompson, 2010). Incidents such as a governor killed by his own bodyguard, indicates that few of them are suffering from religious discrepancies or disagreement with their own religious or moral beliefs, and tasks or duties assigned. For instance, while reporting the reason why they left the job, ex-police staff mentioned that

“I am completely against the attacks on Talibans, it is against my religious values. I cannot serve in a force which compromises my beliefs”.

(Press, 2008b)

It is not a complete picture, however, of how police officers feel about their work experience. Some think that it is a noble task to serve humanity, and even though they are losing their lives, still they are doing it for Allah sake!

(Press, 2008b)

This remark is not very old, but reflects the pain, agony, threat and insecurity being faced by each individual working in the police. There is no surprise why the growing number of men hesitate to join the police force today, where the authorities have no concern about the individual rights of police officers and impose the work motto with all its performance requirements. As the above news quotes illustrate, the grim financial situation coupled with lack of trust and support from police authorities, puts these personnel at heightened risk of psychological disturbances. The negligence from police authorities is a great source of dissatisfaction for them and a growing number of police officers are leaving the job out of fear of no protection.

The growing threat of terrorism, organisational apathy and the government's political misuse of police, brings numerous challenges in the life of a police officer. Contrary to the history of "no interest" in psychological welfare, the Pakistan police still feel pressurized to perform and yet there is no guarantee about who will support them.

By looking at the difficult life experiences of these police officers, the study cross examines the manifestation, psychological impact, mode of recovery (using coping skills) and resilience in officers from England and Pakistan. The cross nation examination might help to understand cross cultural variations in coping behaviours, resilience and mental health. The study further explores the challenges involved in the police force which are a threat to their wellbeing. This study undertakes a police officer as a human who experiences trauma on a daily basis. The impact of such experiences alters their personality and may change the outline of how they cope and survive.

In the context of Pakistan, the increase terrorist attacks on police officers themselves have increased the psychological distress which is manifested in their day to day behaviour. A large number of media reports criticise the inefficiency, lack of vigilance and mental cruelty of police personnel. They are most often described as butchers, criminals and culprits of all (Abbas, 2005). This is primarily because the police have consistently failed in performing efficiently, honestly and in meet the expectations of the public.

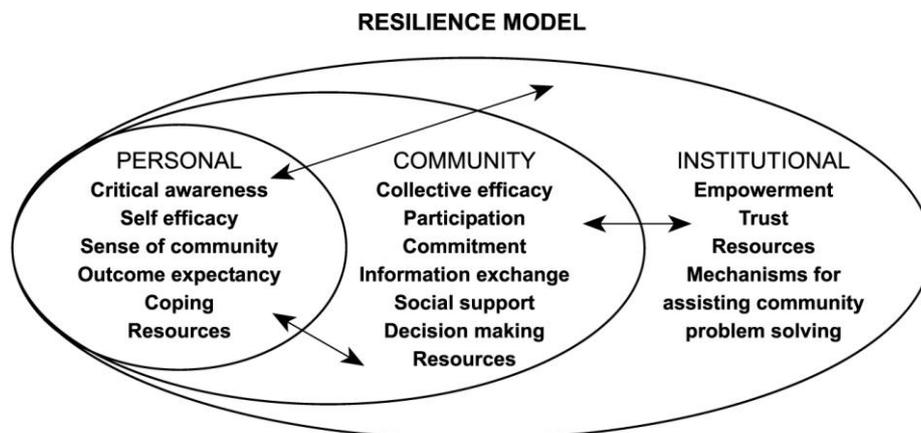
The major challenge confronting the Pakistan police today is its repression in the hands of strong political (and civilian) groups. Traditionally, both the so called democratic and military governments have used the police force for their own political and personal accords. As a result, the individual police man/woman feels they are a helpless worthless being whose life has little or no worth. The police have actively participated in fights

against terrorism, and a large number of police personnel have lost their lives recently under terror attacks.

Attempts to understand the Pakistan police mind, their problems and challenges have rarely been documented. A study conducted in 2005 investigated the mental fitness of police personnel in the Punjab district, revealed a worrying number of officers with high rates of psychological disturbances. The figures depicted a need for progressive examination of their coping capabilities and resources which may facilitate the adaptation process.

*Relevancy of Resilience to the Police Work*

The resilience of a person or group reflects the extent to which they can call upon their psychological and physical resources and competencies in ways that allow them to render challenging events coherent, manageable, and meaningful (Paton et al., 2008). Resilience is a set of thoughts, actions and behaviours which combine together to produce a healthy response. Resilience can be learned and improved by anyone and at any time.



Source: Based on Paton and Johnston (2001)

Figure 2-9: Resilience Model by Paton and Johnson (2001)

Considering the dimensions of resilience as presented in the resilience model by Paton and Johnston (Paton & Johnston, 2001), the ecological model of resilience defines the integration of elements from personal life, community and the institution (such as police). This model is detailed in police context in chapter nine.

### *Police Resilience*

Interestingly, police resilience has been defined as the ability at every relevant level to detect, prevent and, if necessary, to respond to and recover from disruptive challenges (Meredith, Sherbourne, & Gaillot, 2011). Although the classification of personnel as resilient depends on how it is operationally defined, there is no consensus regarding operational definitions of resilience.

Research indicates that resilience is ordinary, not extraordinary (Haw, 2010). People commonly demonstrate resilience. Historical examples include 9/11 incident and October 8<sup>th</sup> earthquake in Pakistan.

### 2.9 Organisational Challenges towards Resilience

Police have to perform additional roles and duties in order to meet the challenging demands of this profession (such as the Olympic games, (Gilmore, 2012). Besides routine duties such as maintaining crime record and investigating crime etc., the police services are required to ensure safety and security on various high profile occasions such as protecting the high profile personalities, deputed at sensitive positions. In the UK, the Olympic 2012 games (Gilmore, 2012) are a huge public event and it will demand additional security measures which means an increased number of resilient police officers will be required to manage the large crowd and manage the risk of safety and security (Smith, 2011). Similarly in Pakistan, the cascade of terror attacks is no more an unusual event, and police are required to remain alert for any consequences (Zimmermann & Issa, 2009).

There are different types of challenges which police organisations come across when there are increasing demands for a resilient police force. A resilient police force refers to the one which is capable of withstanding any sort of trauma and maintains equilibrium while performing duties efficiently. The police organisation ensures during the recruitment process that only those candidates are selected who have tendencies to withstand work pressure. With time, they offer additional training and sensitisation support (such as Critical Incident Debriefing) which helps these personnel to groom and furnish their personal development skills. These challenges can be divided into two broad levels:

West Yorkshire Police has an occupational health unit, which works with the police department to consider mental health related concerns of its officers/staff (Police, 2012b).

Despite these measures, there are a number of challenges being faced by the British police force. Firstly, the challenge of being prepared and ready for any emergency situation (such as Olympics 2012, sports or political processions) is increasingly becoming a pressure. There is a persistent possibility of threat of terror attacks which require a large number of personnel to be allocated at those positions (Riedel, 2008). This also imparts danger to their personal safety and protection. In Pakistan, the prevailing law and order situation is worse than any other country, such that the under resourced, and under privileged police organisation has affected the capability of these personnel to withstand psychological challenges resulting from terrorist attacks or other severe distressing experiences (Abbas, 2011). Since the support system is poor (Ali, et al., 2011), it is unsurprising that they are unable to perform as optimally as expected. Whilst the senior police personnel admit that the morale in police is declining (Fasihuddin, 2011), the concern about how to improve police resilience in given conditions and under available resources is still prevalent.

Britain has a well framed mechanism of addressing trauma related issues (Church et al., 2009). These include Trauma Risk Management (TRiM) (Greenberg, Langston, Iversen, & Wessely, 2011), Occupational Health Unit and training (Stansfeld, Rasul, Head, & Singleton, 2011) or workshops. Pakistani police, on the other hand do not have resources and infra-structure to encompass mental health issues of its officers (Abbas, 2009). The institution of army, on the other hand, is better cultured and developed with mental health needs and risk assessment procedures (Bilal, Rana, Rahim, & Ali, 2007). Thus the police organization has not received considerable attention from the political governments and this lack of awareness can cause further mental health concerns.

As a result of these factors, poor performance of police can be evaluated and improved. It is important to understand the resilience as a concept, and in what ways it can be enhanced with provided resources.

At organisational level, the British Police has the challenges related to the cuts to police numbers, Sick Leaves/Absenteeism, PTSD and Psychological Concerns, Injuries in Police Work, Security, Crime Rate and personal issues.

When these personnel are asked to volunteer for additional duties such as patrolling high risk areas, or at the time of public disrupt, several challenges do arise at both personal and professional level. These include operational duties such as chasing criminals, investigating crimes etc. A large number of police personnel report work related stress

(Hickman, Fricas, Strom, & Pope, 2011). A little but significant number of personnel do recover from these signs and symptoms (Chopko, 2010). Studies indicate that personal level challenges include lack of family support (Amin, 2012), financial difficulties (Santana et al., 2012), loss of loved ones etc. and one of the various reasons for the distress could simply be the exposure to traumatic incidents (such as handling violent crowds).

The Police Force is one of those professions where approaching danger is an essential component of work (Gershon, et al., 2009). It is unsurprising that a wide number of police personnel are seen reporting psychological problems arising due to work related duties (Violanti, 2007). PTSD alone is a growing problem in UK police/military (Green, 2004; Mulligan et al., 2010). A worrying aspect of police work is that the professional requirements can lead to ignoring these growing psychological concerns (Hitchcock & O'Conner, 2010).

The main argument presented in this chapter is that the police in UK and especially Pakistan is under resourced or needs improvement in its existing support system by looking at the positive approaches towards resiliency (Abbas, 2011). The main premise of this study is that the Pakistan police force (specifically the Punjab Police) is under resourced (with both privileges and in terms of police count) and there is complete negligence for understanding psychological issues being faced by the police (Fasihuddin, 2009a).

Police problems with controlling their emotions while on duty suggests a need to investigate these emotional triggers within the context of incident and the challenges related to the emotional integrity of these personnel. One aspect of this question can be the nature of tasks or the duties. One may ask “what happens inside the psychological world of a person who is not only exposed to such difficult situations but also professionally bound to investigate and remain at the scene until resolved? When a person shows aggression or emotional reactivity, what could be the cause?

Pakistani police have answered this question by increasing salaries and providing welfare support (Punjab Police, 2011) although it is still not enough to compensate for the loss they are having. The assumption behind such a step seems to be the lack of understanding about psychological effects and expectation that financial backup may increase efficiency of these police officers who are increasingly inclined towards corruption, bribery, and socially unacceptable behaviour. British police however have been actively involved in

devising plans which can assist the employees mental health related concerns (Gilbody, Bower, & Rick, 2012).

In England, some forces have introduced Trauma Risk Management (TRiM) (Greenberg, Langston, & Jones, 2008) policies which refer to ensure the correct support networks are available to officers. Their policies are quite robust with some forces offering workforce training on what to expect after a critical incident, support programmes, help-lines, advice and referral support.

### *Culture Influence on Resilience*

At cultural level, the resilience refers to the capacity of a culture, to maintain and develop identity and critical knowledge and practices (Ungar, 2008). Along with an entire culture fostering resilience, the interaction of culture and resilience for an individual also is important. An individual's culture will have an impact on how the person communicates feelings and copes with adversity (Utsey, Bolden, Lanier, & Williams, 2007). Cultural parameters are often embedded deep in an individual. A person's cultural background may influence one deeply in how one responds to different stressors. Assimilation<sup>15</sup> (a type of adaptation) could be a factor in cultural resilience (Phillips & Kane, 2009), as it could be a positive way for a person to manage his/her environment. However, assimilation could create conflict between generations, so it could be seen as positive or negative depending on the individual and culture. Because of this, coping strategies are going to be different. With growing cultural diversity, the public has greater access to a number of different approaches to building resilience. It is something that can be built using approaches that mature within each culture and are tailored to each individual.

### 2.10 Summary

The study undertook cross cultural examination, in order to explore how the two different countries having different economical positions, yet similar police organization, survive day to day threats. A further objective of the research is to find out what the relationship is between trauma exposure, impact, level of mental health and resilience. The findings are aimed at identifying cultural variations in trauma expression, challenges and coping.

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<sup>15</sup> Assimilation is a Piaget concept of child development, where learning takes place by adding or expanding upon the information already gained. See work of Jean Piaget (Pearson, 2012)

The growing interest in studying post trauma growth is an obvious diversion from the previous trend of looking at the trauma with perspective of symptomology and psychological ailments. Advancement in trauma related researches appear to have shifted the focus on what factors help to enhance coping and adaptation. This inspires the present study in police dimension where it is intended to look at the ways police officers cope and deal with an exceeding traumatic experience.

There are several factors explaining why police welfare programs are still not as productive as they are intended to be. Firstly, the training aspects are not replicated in the actual police experience. This might be because of individual differences in perception of trauma and variation in the degree of impact the event can cause.

In Pakistan, there is slow but significant development in attempts to examine psychological difficulties. The challenge, however is the rationale behind such attempts that is often contaminated i.e., either to select personnel who are “best fit” or discard the ones which are not mentally efficient enough (Najam, Gul, & Mansoor, 2006). Though few in number, the trauma studies conducted on Pakistani police have shown increase rate of psychological disturbances. In a research study conducted by Najam and Colleagues (Najam, et al., 2006), levels of PTSD are mounting. Police personnel from a wide range of rank and service structure participated in the study. The intention of the project was to identify personnel who can be deputed at sensitive positions. The argument against conducting such studies is that they are not aimed at improving mental health, yet the escalation is more towards tagging people with illnesses.

There is a growing need to examine the psychological health of these personnel. In 2008, governor Punjab was attacked and killed by his own bodyguard who was trained and equipped to protect. The investigation revealed the discord was on the basis of a disagreement in religious notions. Another aspect of the psychological assessment of police personnel in Pakistan is related to the increase *threat* of religiosity and its impacts on their behaviour. Unfortunately, none of these attempts had been the focus of personnel welfare; rather they were aimed at the welfare of people they are protecting.

Similarly looking at the trend of trauma studies in western societies, the shift is very slow but increasing steadily to examine what factors can enhance mental health. The growing body of research is attempting to examine post trauma coping and adaptation.

### 3 LITERATURE REVIEW

#### 3.1 Introduction

A literature review can be carried out in two ways. Firstly, by choosing an area of research, locating relevant studies, and arranging them in an evocative way (Corbin & Strauss, 2008). The Literature review has two main benefits (1) it systematically describes the work done on a specific area of research in the past and (2) appraises other's work. Both the descriptive and evaluative elements are important parts of the literature review.

For the present study, a systematic approach was adapted for the literature review. The following steps were involved:

1. Topic for the study was specified after extensive reading
2. Library Search
3. Preliminary search involved visiting library, online journals, looking specifically at well-defined areas with objective to narrow down research topic
4. Several topics were considered initially based on relevance to the study objectives
5. Sources: Psychological Bulletin, Psych Info, Journals of policing and mental health, books
6. Inter Library Loan service was availed to access articles not readily available
7. In order to understand and comprehend the language and concepts involved, the research articles were read in an order of difficulty (i.e., from simple to complex)
8. American Psychological Association (APA) referencing style was followed (Beins & Beins, 2012)

#### *Scope of Initial Literature Review*

The literature review includes studies dated as old as the 1970`s till up-to date researches in 2009 focusing on key terms like:

Police work and its key issues, Psychological effects of police work, emotions and police work, personality, critical incidents, stress and other related mental health issues in the police, coping with hostile behaviour, coping with handling critical situations, psychological assessment and selection procedures.

The previous chapter discussed different aspects of police work, types of responsibilities and challenges towards resilience in the two countries forces. The comparison of escalated violence and crime based statistics showed drastic need for measures of psychological checks for mental fitness in both forces. This chapter draws upon existing knowledge about psychological trauma in police work, the trauma related factors associated with both psychological morbidity and growth. It explores aspects of coping and resiliency in context of culture and gender. This literature is spread across the following broad themes:

- a. Prevalence rates of psychological disturbances in police work
- b. Critical Incidents and Traumatic Experience: The Police Context
- c. Consequences of trauma exposure in police context
- d. Psychopathological Consequences of Trauma Experiences
- e. Physical Disturbances as a Manifestation of Psychological Impact
- f. Psychological Support Seeking Behaviour and Trauma Preparedness

### 3.2 Prevalence rates of psychological disturbances in police work

The high prevalence of psychological disturbance among emergency workers has often been reported upon (Berger, et al., 2011; Johnson et al., 2005S. Johnson et al., 2005) and findings indicate the severity of disturbance among police personnel. In addition to that, the rates of acute stress disorder and other distressing symptoms that cause meaningful impairments in police personnel (Seedat & Stein, 2001), such as partial PTSD (Ingrid V. E. Carlier, Lamberts, & Gersons, 2000; Maia et al., 2007), are even higher than those of full PTSD (Lilly, Pole, Best, Metzler, & Marmar, 2009; Maguen, et al., 2009). Gender variations in exhibition of PTSD among police personnel are also evident. A study by Lilly and colleagues suggested that there was a stronger direct relationship between pre-traumatic emotional distress and current somatisation among female police officers (Lilly, et al., 2009). Exposure to such situations varies depending upon several factors. In his article on “Sources of occupational stress in the police”, Brown (1990) notes that overall exposure rates were highest for organisational stressors in police work. This ascertains the nature of postulated sources of police stress from earlier studies and extends the analysis to differentiate between exposure to stressors and experience of distress (Brown & Campbell, 1990).

Critical incidents can vary in terms of their severity or impact. Stephens has reported some incidents which have comparatively more traumatic impact than others. The experiences

that were more often reported as having the worst effects on the police officers were cases of sex by force (21.7 %), horrific homicides (22.2 %), serious accidents (27.6 %) and chronic distress at work (27.3 %). The death of a friend or family member (17.6 %) and the death of a police officer (18.2 %) were also often chosen. The most common choice was “other experiences” (49.6 %) (Stephens & Miller, 1998). Weiss identified that around 23% of police officers reported having witnessed a badly beaten adult 51+ times during their career and 20% police officers had seen the body of someone who had recently died 51+ times (Weiss, et al., 2010).

Growing evidence regarding substance abuse (Ballenger et al., 2009), anxiety sensitivity (Asmundson & Stapleton, 2008), PTSD (Subramaney, Vorster, & Pitts, 2011), sleep problems (Gerber, Hartmann, Brand, Holsboer-Trachsler, & Pühse, 2010) and impaired psychosocial functioning (Maia, et al., 2007) among police personnel also reflect the potential impact of trauma exposure.

In one of his research papers on 733 police officers in three US cities, Liberman found out that the exposure to routine work stressors predicted general psychological distress as well as post-traumatic stress symptoms following the officers’ most traumatic career incident. This study reflected that routine occupational stress exposure is a significant risk factor for psychological distress among police officers, and a strong predictor of post-traumatic stress symptoms (Liberman et al., 2002).

### 3.3 Critical Incidents and Traumatic Experience: The Police Context

Critical incidents are likely to be an expected aspect of police work. Incidents which have the potential to impact upon police officers’ psychological wellbeing and are, or have been, a threat to their lives, are called critical incidents. According to the Metropolitan Police Service (MPS), the critical incident refers to:

“Any incident where the effectiveness of the police response is likely to have a significant impact on the confidence of the victim, their family and/or the community”

(Beckley & Birkinshaw, 2009, p. 9).

These two definitions provide a clear distinction between ambiguities with which a critical incident is seen. There can be two aspects of looking at a traumatic or a critical incident.

From the point of view of the organisation, the critical incident is the one which the adequate and more importantly vigilant response is required to carry out an investigation or to deal with the query. This police related definition does not indicate any reference to which the psychological harm is possible (to be addressed) by the organisation or the individual him/herself.

The critical incidents refers to potentially traumatic events that could pose a threat to police officers' psychological and physical integrity (Brown & Campbell, 1990). Due to possible methodological challenges, such as obtaining access to the police in developing countries like Pakistan, the emotional sensitivity of trauma experience in tasks such as homicide investigations has hardly been investigated. Nonetheless, assessment and evaluation of such incidents is critical for police efficiency and resilience. This has been recognised quite recently.

Traditionally, the study of trauma experience has been oriented towards addressing risk factors and psychopathological consequences of encountering traumatic experiences. For example, with reference to policing, a great deal of contribution comes from Henry Vincent (Vincent, 2004), and Liberman (Liberman, et al., 2002), who focused their attention on investigating the prevalence of PTSD and related disorders following shootings, being injured or likewise (Weiss, et al., 2010 Ballenger et al., 2011).

Evidence from the literature supports the commonly held notion that police work is highly demanding (Liberman, et al., 2002) and the nature of the work may impose several challenges towards post trauma adaptation/coping. For example, a recent research finding has indicated that killing or seriously injuring someone in the line of duty might be significantly associated with negative health consequences such as PTSD (Gershon, et al., 2009). Several studies, mainly from the USA, UK, South Africa, Australia and Sweden, indicate that police personnel are exposed to a variety of critical incidents (Abdool & Brysiewicz, 2009; Fikretoglu et al., 2007; Wheatcroft, Alison, & McGrory, 2012) which appear to affect their quality of life. These exposures include physical injury, injuring others in the line of duty, and witnessing death or injuries to other officers and civilians (Carvalho, Cury, & Garcia, 2008), witnessing abusive violence, combat exposure, participating in abusive violence and the amount of violence (Carlier, et al., 2000). Carlier also describes that police work frequently involves exposure to incidents such as armed confrontation, motor vehicle crashes, and witnessing horrifying deaths.

In addition, police officers have been reported to experience chronic non-traumatic stress arising from the demands of their work environment. For example, police officers face pressures from supervisors, attorneys, judges, the media, and the public that can lead to stress related sleep disorders (Neylan et al., 2002).

Henry Vincent in his book “death and police work” extensively explains the experiences of those police personnel who had witnessed death frequently and were exposed to several health related outcomes (Henry, 2004). Adopting a framework of symbolic interactionism, the stories of police personnel were reflective of the degree and severity with which these incidents had an impact upon their lives. This evidence suggests that work related conditions and tasks are a great source of vulnerability towards psychological distress or harm.

#### 3.4 Consequences of trauma exposure in police context

Exposure to tasks involving trauma is well anticipated and recognised in the police work (Lieberman, et al., 2002). The police have been collaborating with other emergency workers to provide rescue and support to those who need it (Maguen, et al., 2009). Police are the first responders who, by the virtue of their work, have to perform duties, which might influence their psychological functioning and compromise their ability to cope. Research evidence supports that long term health related consequences of such exposures are unfortunately inevitable (Bonanno, Westphal, & Mancini, 2011). It is important to understand what factors comprise police resiliency under such circumstances, how they cope and maintain efficiency, and what challenges might be there.

The psychological consequences of police work are well studied by psychologists, and a great deal of insight has been provided by the research in this area. The challenges and responsibilities of the police have changed since the rise in the global threat of terrorism has increased, and indeed police resiliency, which is a benchmark of good police performance, is in danger. In these conditions, it seems appropriate to investigate how these personnel are coping and utilising given resources to adapt and grow positively. It is also interesting to explore how cultural factors shape and influence coping attitudes and behaviours.

This chapter critically examines the concept of Psychological trauma, Resilience and Psychological Health, and then reviews the literature that evaluates: psychological trauma

in police work, risk and protective factors towards resiliency, and psychological health. It also reviews the coping strategies being deployed to cope with such experiences. Current methodological issues in this area of inquiry and future directions for research are noted.

### 3.5 Psychopathological Consequences of Trauma Experiences

A comprehensive amount of research has explored the nature of work and its impact on mental health suggesting that people who are in constant exposure to trauma (such as the police, military personnel and ambulance workers) are at a high risk of developing psychosocial problems compared to others (Agaibi & Wilson, 2005; Bilal, et al., 2007). The studies describing the psychopathological aspects of police work have provided sufficient evidence to assume that police work may lead to depression, anxiety, PTS, PTSD and several related pathologies (Chen et al., 2006; Jones & Wessely, 2007). These pathologies have been shown to appear in the form of behaviour. These studies have described the increased rate of psychological disturbances and their resulting outcomes such as a decrease in police numbers and staff on sick leave. The detailed view of such research is described as follows:

### 3.6 Physical Disturbances as a Manifestation of Psychological Impact

Research indicates that the severity and frequency of occurrence of these incidents is predictive of the adverse psychological outcomes (Daniel S. Weiss, et al., 2010) which include disturbed sleep quality (Winwood, Tuckey, Peters, & Dollard, 2009), increased cortisol level (Inslicht et al., 2011), probability for cardiovascular diseases, neurosis illnesses, and PTSD.

In one study, Neylan investigated the sleep quality of 733 police officers. He reported that a large percentage of police officers report disturbances in subjective sleep quality. He concluded that although the life-threatening aspects of police work are related to nightmares, the routine stressors of police service work seem to affect global sleep quality in these subjects quite significantly (Neylan, et al., 2002).

One of the most investigated psychological consequences of exposure to critical incidents is Post-traumatic stress disorder (Gersons, 1989). The prevalence of PTSD among USA police officers varies widely, from 7% to 35% (Ingrid V. E. Carlier, et al., 2000; Marmar

et al., 2006). This high variability is due to the presence of multiple risk and resilience factors.

Recent studies suggest a high prevalence of and general increase in depression and suicidal ideation among police personnel (Carlier, et al., 2000 Carvalho, et al., 2008). In one study conducted on the US military force, the overall prevalence of suicide ideation for female police officers was 25% and for males it was 23.1% which was above the general population rate of approximately 13.5% (Kessler et al., 2005). Results also indicated a higher prevalence for depression in these officers (12.5% for women and 6.2% for male officers) as compared to the general population (data from the National Institute of Mental Health (NIMH) reported 5.2% prevalence for depression) (Weissman, et al., 1996).

Police officers are reported to be at elevated risk of adjustment disorder (Charles et al., 2012), Acute Stress Disorder (Pole et al., 2009), and PTSD (Yoshimasu et al., 2011), as well as impaired job performance (Hillgren & Bond, 1975; Marmar, et al., 2006). In one study, the point prevalence of PTSD among New Orleans Police Department officers exposed to a single trauma was 7% (Stephens & Miller, 1998). Furthermore, depression, other anxiety disorders, cognitive impairments, and substance abuse are elevated in samples exposed to trauma as well as disaster work (Arnetz, et al., 2009).

Evidence from the literature also suggests several risk factors associated with the psychological wellbeing of police officers. A recent study identified the significance of psychological strain, emotional dissonance and emotional job demands during the working day of 65 Dutch police officers. The researchers, using a 5-day diary design, found that the psychological strain at the start of a work shift had a positive effect on the experience of emotional dissonance and psychological strain at the end of a work shift (Van Gelderen et al., 2007).

Several studies have investigated the impact of stressful events, which are inherently part of an officer's work, leading to various social and psychological disturbances. Collins and Gibbs (2003) carried out a study to investigate the origin, prevalence and severity of stress-related symptoms within a county police force (Holmgren, 2008). They carried out a cross-sectional survey on 1,206 police officers along with the GHQ (General Health Questionnaire) to identify mental illness associated factors. Information obtained from the survey was correlated with GHQ scores to identify stressors related to stress and mental illness. Organisational issues such as a lack of control over workload, were found to be

significant contributors towards mental illness as well as certain personality traits making certain officers more vulnerable.

The psychological assessment is an intensive process followed by a number of procedures and levels. These include: aptitude and ability testing, mental fitness tests, physical fitness tests, etc. (Loftus, 2009). Different psychological tests can be used to measure personality factors which make them more “at risk of stress/depression and related illnesses” such as MMPI (Minnesota Multiphasic Personality Inventory), MMPI 2, CPI (California Personality Inventory), TAT (Thematic Apperception Test), Rorschach etc.

Psychological services, such as counselling and mental health awareness programs, are utilised widely by the police forces in the West such as England, to help personnel cope and adjust to distressing feelings due to work related trauma experiences. It is established evidence that the psychological support can help to boost the capability of police personnel to deal with their work related psychological concerns. Despite these advancements, the police forces in developing countries have little resources in comparison to the mental health related challenges in the country. In Pakistan, psychological services such as counselling and support are a growing area; however there is little or no recognition for need of professional help or support within police organizations. Considering this gap, the present study also explored trend and tendency of psychological consultation in the present sample of police officers to broaden the understanding of how do they cope with the resources that they have.

#### *Working in Trauma Conditions*

The recent definition of traumatic experience as it appears in the Diagnostic and Statistical Manual for Diseases and Illnesses (DSM IV) refers to an event/experience where:

- 1) The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others, and:
- 2) The person's response involved intense fear, helplessness, or horror

(Sadock & Sadock, 2008, p. 260)

In clinical terms, a traumatic incident is defined as ‘an event that involves actual or threatened death or injury to oneself or others’ (Hodgins, Creamer, & Bell, 2001).

Therefore, any event or incident that has the potential to disturb the mental or

psychological wellbeing of a person for long periods of time, can have long term impact, and can lead to various psychological problems.

These definitions provide an unclear or ambiguous picture of what can be categorised as a trauma, firstly because trauma is a relative term and it is difficult to differentiate the incidents as a causative factor of inducing trauma. For instance, encountering an accident itself can have several levels of trauma impact. Some personnel can be deeply affected by it due to the fact that they had suffered from a significant loss quite recently. These situational factors are not explained or detailed in the definitions entailed by DSM, and therefore need to be challenged and revised.

Police officers experience traumatic experiences on a regular and repeated basis (Huddleston, et al., 2007). These traumatic experiences may influence how these police personnel deal with a situation involving personal harm (Tuckey, et al., 2011). Confronting traumatic situations can lead to the development of Post-traumatic Stress Disorder (PTSD), depending on the frequency and level of exposure (Huddleston, et al., 2007).

Besides the sensitive nature of traumatic events, they are emotionally provoking and triggering (Berntsen & Rubin, 2008) and can have physical or psychological impact on an individual. As may be obvious from the definition, some situations or events may produce stress, while others might not. Several researchers have attempted to identify the nature of situations that tend to produce stress and psychological disturbance in the majority of officers who encounter them.

In the police service, exposure to multiple events such as dealing with dead bodies have a tendency to increase the intensity of emotions experienced due to repeated exposure to traumatic experiences (Fahmy, Cho, Wanta, & Song, 2006; Sumathipala, Siribaddana, & Perera, 2006). For most of the police officers, dealing with such events is part of their investigation and routine (Ballenger, et al., 2009; McFarlane, Williamson, & Barton, 2009; Reynolds & Wagner, 2008; Daniel S. Weiss, et al., 2010).

Moreover, both young and older officers are vulnerable towards developing psychological strains in their lives as a result of such investigations (Henry, 2004) Officers of any age can have potential risks of depression, suicidal ideation, anger, aggression, separation issues, relationship problems, or having experienced childhood physical or sexual abuse (Bluhm et al., 2009).

Family histories of psychopathology and substance abuse are pre-existing vulnerability factors for experiencing greater pre-traumatic distress to critical incident exposure which, in turn, increases the risk for the development of the symptoms of post-traumatic stress disorder. Replication in other first responders such as the military and civilians will be important in determining the (generalizability need another word) of these findings (Inslicht et al., 2010)

### 3.7 Psychological Support Seeking Behaviour and Trauma Preparedness

The psychological stress resulting from Police work is often inevitable due to the nature of the work involved. However due to preparedness and proper support, the risk and vulnerability for physical/psychological ailments can be reduced considerably. Dominant research in the area of police stress has revealed the possible negative impact of dealing with work related stressful situations or conditions such as depression and PTSD (Brand, Gerber, Pühse, & Holsboer-Trachsler, 2010; Chen, et al., 2006). On the other hand, a growing number of researchers have also considered how these personnel adjust and cope with the experiences which are likely to happen in police work (Arnetz et al., 2009). These researchers have revealed that besides personal efforts (du Preez, Cassimjee, Ghazinour, Lauritz, & Richter, 2009), beliefs and meaning of life (Ghazinour, Lauritz, Du Preez, Cassimjee, & Richter, 2010), support network (social support) (Brough & Frame, 2004) and psychological support at work place (Page & Jacobs, 2011) can be very useful. The readily available psychological support groups played a very important role (Inwald, 2010) besides being resilient (NPIA, 2011) and having certain personal traits (Tehrani, 2010).

Police authorities, who are concerned with the mental health and wellbeing of its employees, give special consideration to providing psychological services to its staff/officers who may have received damage. Police organizations have been utilising psychological services for the last two decades. The role of police psychologists has been extended from screening individuals for the force to providing / ensuring mental health support/care to the police employees. As part of the mental health care, different procedures have been introduced by police psychologists. Some of the procedures include Critical Incident Stress Debriefing (Carlier, Voerman, & Gersons, 2000), eye movement desensitisation and reprocessing (EMDR) (Bleich, Kotler, Kutz, Shalev, & Chambless), and other psychological services such as clinical counselling (Davis, 2011). Besides the

support, stress management training is also provided, though not systematically. The evaluation of such training programs is still a concern.

Psychological services are offered as part of employee health assurances in most developed countries such as USA (Reese, 1987), UK (King & Waddington, 2004), however proper psychological support facilities such as police psychologist are not available in Pakistan. In addition to the poor logistics and increased pressure to perform well, the poor law and order situations and conflicts in the country have raised challenges related to mental health and the fitness of police officers. Contrary to the rest of the developed countries which have associated mental health professionals with the force, Pakistan police does not have enough resources to cater for its employee's wellbeing or fitness. Although social support may be available to personnel (such as friends, parents or family), the professional psychological services are either absent or not functional in most of the developing countries (such as Pakistan).

In Pakistan, the psychological support is already limited. The understanding of support usually surrounds family and friends, or religion. The professional support is frequently tabooed due to a lack of awareness and understanding (Karim, Saeed, Rana, Mubbashar, & Jenkins, 2004). For this reason, a high number of personnel feel depressed, anxious and dissatisfied with life due to underlying subconscious conflicts.

### 3.8 Summary

There are quite a lot of challenges which today's police are facing worldwide: more specifically, there are concerns related to mental fitness. Some of the observations from the literature which might be applicable to most of the country's police force indicate that there is a shortage in the strength of police officers as compared to an increased crime rate. There is confusion about the police role and nature of deputation which has emerged as a "new stressor" which cannot be avoided due to recent attacks. Literature has reported increased rates of psychological problems in police personnel due to a range of factors which will be discussed and explored in later chapters. The police force in Pakistan is massively criticised due to its non-vigilant and inappropriate behaviour. In Pakistan, the psychological health of the personnel has always had less or no priority. Literature also documents an overall increase in public distrust due to corruption in the police department. There is heightened government and political influence on the police, therefore the force cannot work and execute orders independently. Pakistani Police personnel have to perform

additional duties, work more shift hours, and still they are underpaid, unrecognised and unappreciated for their work. There seems to be a general increase in additional and unsatisfactory (or force) job deputations which are made due to political pressure or influence in Pakistan. There is no element of fairness in the police system.

The majority of the police personnel in Pakistan are front line staff (constables) who are less educated and therefore more ill-mannered since they are the ones in direct contact with the public. Therefore, routine psychological assessments of police personnel are necessary to identify the positive adaptation and factors enhancing resiliency.

## 4 THEORETICAL FRAMEWORK

### 4.1 Introduction

In this chapter, the researcher emphasises the complexity and diversity of responses to extreme events, and the need to take those factors into account. Coping with traumatic experiences can be a challenging task. The occupational health units have devised several intervention plans to overcome this stress. The focus of this chapter is to thoroughly examine the theoretical models that explain the process of acquisition of trauma and coping behaviour, by critically examining the interventions to answer the gaps in literature and knowledge generated by them.

#### *Defining theoretical framework*

A theoretical framework refers to a framework or structure of interrelated concepts, not well testified and therefore need further exploration (Black & Mendenhall, 1990). Every research needs to incorporate a strong basis of its theoretical framework to establish what methods and methodology was used to address research questions (Robson, 2011).

The concept of trauma and its progression towards positive growth (or mental health deterioration) is still unclear because its definition and meaning/perception varies across individual and the societal levels. The cultures or societies shape the responses or reactions to a large extent. Such an argument is largely supported by the physiologists (Banks, et al., 2011). Hence the biological models might not be sufficient to explain the causes of stress and therefore this paradigm cannot be used to generalise stress or resilience across culture due to variation in the experiences, emotional reactions and psychological responses. This chapter introduces various coping models describing the trauma processing, and attempts to redefine concepts under influential research methodologies. The chapter begins with defining the concept of resilience in police work, its components and contextual placement of trauma experiences. It goes on to explain the models explaining emotional reactions towards trauma, factors affecting trauma reaction-response, positive psychological reactions and finally the resilience. The chapter emphasises components of resilience and factors that can enhance resilience. Furthermore, a trauma metamorphosis model is suggested in the end, which is inspired from the ecological models of metamorphosis (Harvey & Bryant, 1999), explaining the process of growth. The main argument of the suggested model is that the trauma processing requires interaction of various factors and

this process appears to take place at an unconscious level. The conscious or intentional efforts to understand one's trauma processing cycle and problems may enhance resilience and contribute towards positive growth. This aspect is discussed further in Chapter 9.

#### *Summarising the definitions and Theories*

Most of the psychological theories examining the concept of trauma or coping consider various aspects of cognition, physiological changes and self-development. As with the human resilience to trauma and adversity, these concepts are interrelated and culturally grounded. The psychological paradigms vary in terms of how they interpret human behaviour and response. These section overviews such models of explanation of conceptualization of trauma, reactions to trauma and coping. It also integrates models of psychological resilience to enlighten about the positive growth following trauma.

#### 4.2 Conceptualising “Trauma”

The concept of trauma has no single linguistic corollary according to the multicultural studies. In one study, the concept of psychological trauma and idiom expression were analysed in a Nepali population where the Maoist civil war resulted in massive relocation within and outside the country (Bandura, 2012). This also indicates that across cultures, the perception of trauma varies in the types and severity of trauma.

#### *Psychological Trauma: The Medico-Psychiatric Historic Context*

Trauma comes from the Greek Word “wound” as described earlier. The understanding of this concept emerged after the World War II. Critiques of traditional psychological approaches argue that the psychology following World War II focussed predominantly on studying the pathological patterns of trauma experiences, and sought to find a “cure” for “psychological diseases” (Lilly, et al., 2009) and therefore it has excluded the clinical population or patients as distinct cases who suffer some sort of abnormality. The recognition of PTSD as a disorder in the APA manual back in the 1980s reflected the way psychological trauma was interpreted.

Historical review of the conceptualisation of trauma indicates that initially, post-war symptoms (such as those of neurosis in the present day terminology), were attributed to a personal predisposition (Jones & Wessely, 2007) and the possibility of the event itself as a cause of trauma was ruled out or dismissed. This was followed by another wave of change

whereby the events were considered as triggers of emotional or psychological consequences following war or other traumatic incidents.

The study of positive adaptation to trauma started to gain the interest of researchers as early as the end of the nineteenth century. Jones in 2009 has cited historical evidence which describes how trauma was conceived and conceptualized (Jones & Wessely, 2007; Lilly, et al., 2009). In her writing, she details a series of progressive changes towards the understanding of trauma starting from early 19<sup>th</sup> century. It was Freud who initially provided the idea of secondary gain associated with psychological symptomisation. The phenomenon of shell shock also prevailed among UK neurologists who initially proposed that psychological trauma could have an organic origin (cerebral impairment), or be a consequential effect of some toxic shell (Myers, 2011). This idea was later refuted because several soldiers who presented psychological illness had not even been near the toxic material or “the shells”. This led to yet another hypothesis; an inherent predisposition to nervous diseases (Jones & Wessely.,2007). The diagnosis of psychological trauma took different terminologies such as war neurosis (Gentz, 1991), the psycho-neuroses of warfare (Talbot, 1997) and combat wounded (Brown, 1994).

#### *The paradigm shift towards positive psychology*

Since the recognition of PTSD, it appears that psychological trauma acceptance was not as rapid as it was thought. With growing global changes, the dimensionalities of PTSD, its origins and explanations, kept emerging. It was not until the late 1980s that the one-sided view of psychological trauma, or trauma experience started to reshape. That was the time when psychologists worldwide witnessed an increasing shift of studying the positive outcomes of a challenging event i.e., positive growth following a trauma experience. It has also been argued that these two dimensions were previously studied “independently” as separate variables, i.e., a group of researchers (or clinical psychologists) interested only in psychopathological consequences of the trauma experience, and others who explored positive growth (Sesma, et al., 2005). Universally it is considered important to equally acknowledge the two aspects of the trauma experience response (Chopko, 2010).

Martin Seligman formally developed the premises of positive psychology in 1986 (Peterson, 2006) and argued that the attention of psychologists needs to be placed on how to improve the patients ‘quality of life, rather than investigating merely the negative consequences of traumatic exposures.

Theoretical descriptions about the struggle with trauma have elucidated both aspects (the pathological aspect and positive growth), but little research has incorporated both. In this research, a theoretical understanding of how a trauma experience might advance towards positive adaptation and coping has been critically examined (considering the impact of exposure on psychological wellbeing). Studying both aspects might give a holistic view and therefore, a better understanding.

Since 9/11, the surge of literature around post-trauma effects has been seen to be growing. Dr Spiegel, who is a noted scholar for his work in the area of PTS<sup>16</sup>, has discovered that around 96% of post-9/11 incident affecters' sought help from talking to others, religious faith, and engaging in charity work or group activities. He also observed that a few (36%) initiated charity work to help others who have been affected in a more or less similar way (Briscoe, Henagan, Burton, & Murphy, 2012)

This reveals that an incident may help to motivate a person to have a changed view towards life, a positive view which not only helps in their growth, but also makes them stronger and resistant towards further incidents.

#### *The Modernistic View of Psychological Trauma*

As discussed above, the term “psychological trauma” emerged following a series of developmental changes relating to how it was previously conceived. Recent conceptualizations of trauma indicate that it can be considered as a transformative phase (Henry, 2004; McCann & Pearlman, 1990) resulting from an overwhelming encounter during an incident. Psychological trauma has also been seen as an after effect of a traumatic experience.

#### 4.3 Approaches to study trauma

Various approaches explain the genesis of the term “Psychological Trauma”. The main discourse in the thesis revolves around Freudian *psychoanalytic approach*; *Cognitive and Emotional Theories*, *Self Psychology*, *Symbolic Interactionism Paradigm*.

A critical evaluation of each approach is presented in upcoming sections focusing primarily on segments relevant to the present research.

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<sup>16</sup> Post-traumatic Stress

### 1. Psychoanalytical Approach

Some important contribution from defence mechanism is discussed as following:

The defence mechanisms are body's natural psychological reaction in the advent of psychological crisis, Defence mechanisms are used unconsciously (and consciously) not only to protect from the negativity of the disturbing emotion, but also acts as an adaptive component or a coping factor (Vaillant, 2011). Most frequently cited defence mechanisms in the trauma management are dissociation and cognitive distortion (Halligan, Michael, Clark, & Ehlers, 2003).

### 2. Dissociation

Dissociation refers to detachment with reality (internal or external). It is an attempt to suppress adverse emotional influence by detachment from the surroundings. Researchers (Vincent, 2004) have described the following sub dimensions of this trait:

#### a. Emotional Numbing

Emotional number refers to

#### b. Absorption and Imaginative Involvement

#### c. Depersonalization and Derealisation

#### d. Amnesia

These are some of the most commonly occurring forms of dissociations which act as a defensive strategy of the body against aversive emotion. The scholarly debate surrounding defence mechanism genesis suggests that it is more likely to be considered as a positive adaptive approach rather than a sign of pathology (such as social withdrawal is considered as pathological sign in schizophrenia).

### 3. Cognitive Distortion

As the name amplifies, cognitive distortion is alteration, modification and transformation of ideas, feelings and emotions into favourable outlet (Fitzgerald & Cohen, 2011).

### 4.4 The Positive Psychology Perspective

The ability of an individual to transmute the incident or his/her experience for positive growth and gain resiliency and meaningful changes in one's life, has long been documented by positive psychology researchers, as well as past historical accounts of surviving with struggles (Griffin & Kahneman, 2003). In one article, Saakvitne (1998) cites evidence which confirms that the study of resilience in calamity and adversity is not

very recent. Documentation from newspapers, novels, and old testimonials indicate that people have been thriving and striving for their growth (whether natural or by effort).

#### 4.5 Theoretical Perspectives on trauma reaction/response

The study of traumatic stress events is not new. For around 20 years, researchers have been examining different aspects of trauma, being affected by the changes incurred upon by disasters and happenings from time to time. For example, the 9/11 incident provided further research questions and added to the dimensions to the study of trauma. There are a number of theoretical explanations to answer the critical traumatic incident reaction or response. Today, the scientific community is attempting to explain how trauma is perceived, what is the role of the incident and what factors are associated with trauma, coping and support. The following paradigms are worth noticing:

##### *Physiological Perspective*

One of the scientific scholarly explanations comes from the findings of Hans Selye (1930) who based his model on focusing on the response resulting from experiencing trauma. According to his beliefs, a particular trauma/stress reaction will go through three physiological stages. Firstly the fight and flight response termed as alarm reaction. According to Hans Selye's General Adaptive Syndrome (GAS), the human body tends to activate its Sympathetic Nervous System, in which the body releases stress hormones, which help to alert/mobilise the body for the stress.

After that, the body successfully adapts to the stressor and achieves resistance (the resistance stage). According to Hans Selye, although the person may achieve stability, it might be temporary and that the immune system of the person may get compromised during this stage, therefore making him/her vulnerable towards psychosomatic symptoms such as depression, burnout or other somatoform diseases. In the third stage, the parasympathetic nervous system operates and leads to burnout or exhaustion. Therefore this stage is referred to as: exhaustion stage. This concept is clear from the following figure:

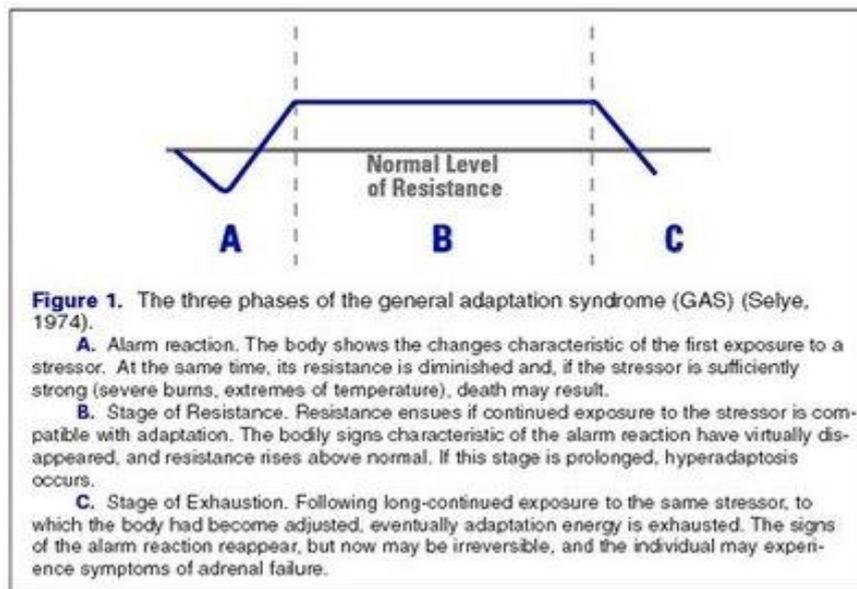


Figure 4-1: Stages of General Adaptation Syndrome (GAS) (Petri & Govern, 2004, p. 90)

The concept of physiology of the response by Hans Selye, has been criticised because of providing insufficient explanation for the influence of individual differences in trauma reaction and response. Moreover, the model does not describe the influence of situational variables such as the stressor or the event itself, the proximity and closure in respect to its occurrence, and the psychological consequences emerging from the situation itself and how can this aspect be measured or evaluated?

In 1967, Holmes and Rahe offered another approach towards examining a stressful response. They developed a measure comprising of 43 critical incidents and asking respondents to rate them in terms of severity. Although useful, this paradigm still fails to explain the individual differences in understanding and reaction/response (for example the gender difference).

### *Cognitive Perspective*

Another way of examining the complexity of trauma reaction/response is to consider how it impacts on the cognitions of the individual. Various scholars have favoured this paradigm. The well-known cognitive transactional process perspective explains stress as a result of interaction between the event and the person as well as the appraisal of the individual of the whole situation. This model offers three theoretical assumptions i.e., the transaction, process and the context. According to this perspective, it is assumed that:

When an incident takes place, the interaction between person involved and event influence each other to produce a stressful response. Stress is relative and can change from time to time. The transaction of the situation is based upon the context of the situation and appraisal by the individual.

According to Ralf Schwarzer, the model is heuristic and some aspects of it cannot be scientifically tested or proven. Lazarus has explained the stress as a continual process having antecedents, mediating factors and after affects. This process is termed as unfolding process. The following figure explains the idea more clearly.

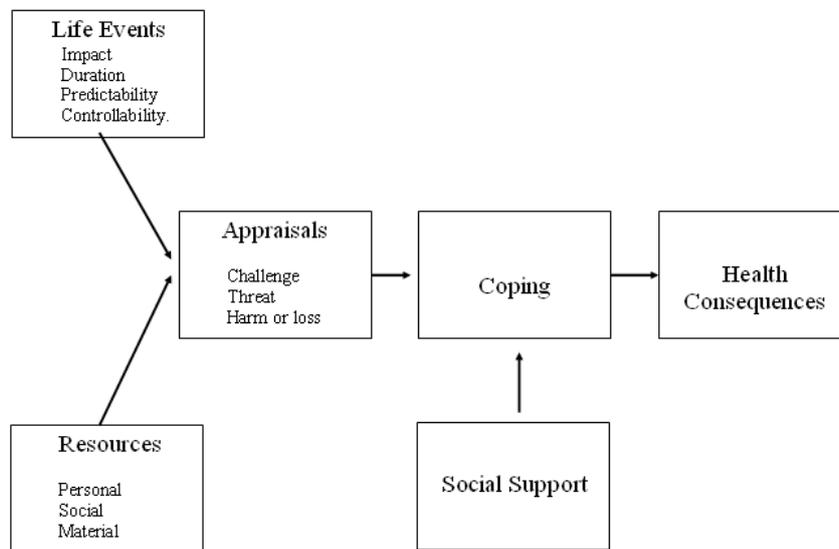


Figure 4-2: Process Model of the Stress

1. Constructivist Self Developmental Theory (CSDT) (McCann & Pearlman, 1990)

The positive psychology view provides a well-equipped theoretical understanding towards how resilience is achieved, how it varies across time, and what factors promote resiliency. To achieve these aims in an inquiry, the present research follows constructivist self-developmental theory (CSDT), which provides a better understanding of the process of adaptation and resiliency.

*The main premises of CSDT*

The response to a traumatic situation is difficult to conceptualize due to several factors. Firstly, because the post-trauma response is quite subjective in its expression and various factors such as time and place, and personal, political, cultural and social situations appear

to have their influence. The way a particular event is (or will be) perceived depends on individual, organizational/environmental and consequences-related factors. CSDT provides a holistic view of addressing all these factors and how they contribute towards post-traumatic growth and stability. CSDT provides insight into both negative and positive adaptations to psychological trauma.

Once again the belief about various life aspects come from the society in which one lives and has been brought up. It is more than one's genetic makeup. The authors on psychological resilience contribute it as a personality trait (Tennant, 2001), a genetic entity (Pomaki, et al., 2004), and a creative process (Huddleston, et al., 2007). What follows now is an overview of psychological resilience in police context.

Hence the definition of resilience entails the resource and capacity as an important index of resilience. In one of the RAND projects (Hunt, et al., 2011), this definition has been used to define police resilience and has been measured quantifying the amount of resources and capacities measured against the number of sick leaves, absenteeism or sickness presentation.

Resilience needs to be understood at both individual and organisational level in police context. In police terms, a resiliency is an outcome of balanced execution of duties between demands and resources (Paton, et al., 2008). This may include the availability of vehicles to dispatch personnel on the crime scene, quantity of personnel available to execute a task. Resilience is also considered as a response to an outstanding event. For example how some individuals may think, feel, or act during and after the most stressful events in life (D. Goldberg, P. et al., 1997).

#### 4.6 Nature of stress in police work

Police officers are actively engaged in performing various types of tasks such as paper work, management duties, operational duties (such as patrolling and crime investigations), forensic analysis etc. As part of their job, they have to deal with difficult life changing events or experiences. The death of a close colleague on duty, serious accident, terrorist attacks on public places resulting in massive deaths, and several other traumatic events are examples of the many challenging life experiences involved in police work.

Police officers generally adapt and cope with these stressful conditions over a period of time. But the question remains, what helps these personnel to deal with adversity? The most important factor might be resilience i.e., an “on-going” process that requires time and effort to engage in taking a number of steps towards improvement (Paton, et al., 2008). Each police organisation aims at producing stronger, emotionally well-equipped officers who can meet the demands placed by the Job. There are two possibilities when a police officer encounters an unpleasant and distressing situation. Either he/she comes out emotionally stronger or can become overwhelmed with guilt, anger, doubt, anxiety and depression (e.g., why I could not save lives when I think I could have if I had backup support!). The consequences to being disturbed with such feelings might affect personal (e.g., relationship problems) or professional (e.g., dissatisfaction with job) life.

These outcomes of a traumatic situation may depend upon several factors, such as departmental policy/support, media involvement, psychological support resources, previous training, work experience, and on-going life problems (such as financial, marital or health issues). In these circumstances, the resilience plays a vital role in avoiding going in the loop of psychological difficulties. Resilience is like a backbone for a police force where the psychological impacts of dealing with adverse situations is well apprehended and most expected.

What police organizations or personnel can do is to enrich their emotional competence and personal tendencies towards raising their own awareness and allowing themselves to emerge more strongly after each incident or experience. Understanding resilience in police personnel gives a better understanding about how to develop ways to promote competence in more vulnerable groups within the police (such as those with weaker emotional competence).

#### *What is resilience?*

Resilience is a process of adaptation in the face of trauma or a psychological threat e.g., operational duty related stressors, duty related investigations, etc. It is characterised by “pattern of positive adaptation into the context of significant adversity” (Snyder & Lopez, 2007, p. 94).

The researchers have described three basic elements of resilient system/organisation i.e.,

1. It is able to “withstand” any sort of shock or threatening experience
2. It is able to “adapt” to the changes after the event takes place
3. It is able to “transform” if the current way of life is not feasible

Resilience of a person or group reflects the extent to which they can call upon their psychological and physical resources and competencies in ways that allow them to render challenging events coherent, manageable, and meaningful (Paton, et al., 2008).

Resilience is a set of thoughts, actions and behaviours which combine together to produce a healthy response. It is difficult to define a single constructive definition of resilience since the concept is relative to one’s perception about personal tendencies to remain calm.

The resilience can be learned and improved at any time and by anyone. Interestingly, police resilience has been defined as *“The ability at every relevant level to detect, prevent and, if necessary, to respond to and recover from disruptive challenges.”*

Although the classification of personnel as resilient depends on how it is defined operationally, there is no consensus regarding operational definitions of resilience.

Resilience can be learned or improved. Police personnel frequently display their resiliency while dealing with traumatic situations in the workplace.

#### 4.7 Organisational Challenges towards Resilience -- Police Context

Police have to perform additional roles and duties in order to meet the challenging demands of this profession. Besides routine duties such as maintaining crime records and investigating crime etc., police services are required to ensure safety and security on various high profile occasions such as protecting the VIPs, deputed at sensitive positions. In the UK, the Olympic 2012 games will be a huge public event and it will demand additional security measures which means more police needed to be deputed and resilient to face the threats and risks involved (Jennings & Lodge, 2009). Similarly in Pakistan, the cascade of terror attacks is no more an unusual event, and police are required to remain alert for any consequences (Sahir & Qureshi, 2007).

During any national disaster, police along with other emergency services are the front line rescuers who provide relief to the victims of such disasters e.g., by clearing away the

debris or extinguishing the fire (Huizink et al., 2006). To take part in such activities require resilience as an essential trait.

A resilient police force refers to the one:

"Having the capacity and capability (both internally and through collaboration with partner organisations) to provide appropriate and sustainable response to a range of demands (including typical requirements, predictable and unpredictable incidents) with acceptable parameters of risk whilst optimising quality of service and efficiency"

(NPIA, 2011).

Thus police resilience is usually taken in terms of the demand and resources, while it neglects the emotional cost paid by the police officers on the duty. It is suggested that the police authorities may include the psychological aspects of coping and positive growth into redefining the definition as it has strong impact on the intervention and training programs.

#### 4.8 Summary

This chapter provides theoretical explanation of trauma, traumatic reactions and coping in police context. Taking an approach from the positive psychology, the theoretical framework examined role of various coping strategies in improving wellbeing of police officers working in critical conditions. The literature on trauma focuses on cognitive, emotional theories, which describe the role of event, person and the environment in governing an emotional reaction or a response. The theories of resilience (psychological resilience) describe the importance of choosing constructive and positive coping mechanisms to enhance efficiency at work place. This chapter redefines the police resilience and suggests incorporating the importance of psychological wellbeing into the definitions devised by the police authorities. This might help in elaborating an understanding of police resilience and its factors in work place.

## 5 METHODOLOGICAL FRAMEWORK AND STUDY METHODS

“Just as painters need both techniques and vision to bring their novel images to life on canvas, analysts need techniques to help them see beyond the ordinary and to arrive at a new understanding of social life.”

Strauss & Corbin (1998, p. 8)

### 5.1 Introduction

The above mentioned quote elaborates how a framework or mental vision is important in contributing towards the overall objective of any research. As Strauss and Corbin have adequately stated, the research analysis needs strategies to help understand the phenomenon hidden from the normal vision in a better way. Taking this into consideration, this chapter is concerned to elaborate and justify the steps involved in selection of research paradigm, tools and sample. This research encountered different sensitive and ethical issues related to selection of method and data collection. The cross cultural factors such as meaning and understanding of support, nature of traumatic experiences and political situation in the two countries imparted sensitivity to the conduction of the research. Within the sensitive and rigorous framework, the research undertook an eclectic approach by adopting mixed methodology in order to explore the traumatic experiences and evaluate the nature of association between factors related to coping and resilience.

As a research process deals with prepositions or assumptions used in an argument in strict adherence to logic (Creswell, 2009), the mixed methodology aspect provides a perfect venture to carry out study objectives with an appropriate set of tools and methods. As indicated in the research rationale, the mixed methodology approach provides enriched understanding about the complex dimensionality of psychological trauma in police work through combination of qualitative and quantitative investigation and allows the personal experiences to emerge from the narratives expressed by the personnel.

This approach has been undertaken along with the grounded theory method i.e., allowing theoretical understanding to emerge from the study itself. These two approaches are the main argument of discussion in this chapter along with the explanation of methods involved in data conduction and questionnaire synthesis.

### *Defining Research Process*

A “research” can be referred to as a parlance of search for information/knowledge about a particular concept or idea. According to the scientific community, a research expedition is specifically carried out to “make descriptive or explanatory inferences on the basis of empirical information about the world” (Gray, 2009, p. 7). As reflected in the writings of famous research scholars such as Robson (2011) and Denzin (2003), an essential component of research is strict adherence to the selection of valid and reliable methods adopted for the selection of instruments (Anastasi & Urbina, 1982) and approaches designed to answer specific research questions (Robson, 2011). A research process, therefore, begins by locating resources for information, identifying specific research questions, identifying ways of measuring/testing the information, making inferences and finally outsourcing conclusion.

### *Differentiating between Methods, Methodology and Design*

In order to understand the research process, it is essential to be able to differentiate between different terminologies i.e., research methods, methodology and design and the way they are used. To begin with, one of the most essential components of the research is “methods”. A scientific enquiry involves certain standardized steps and procedures (Robson, 2011). Essential components of research must introduce and explain/justify the approaches used to understand the underlying mechanisms and assumptions, the validity and reliability of instruments (Gavin, 2008). An approach can be understood as a philosophical/theoretical explanation of the relationship between variables, or the justification of the use of certain methods. Keeping these complexities under observation, the chapter details the process involved in the research by explaining research methodology and methods in context of research setting and design. The theoretical framework has been presented in the earlier chapter (Chapter four).

### *Researching Sensitive Issues*

Researching sensitive issues such as those exploring traumatic experiences is often quite challenging because it raises several methodological and theoretical issues. There are different aspects of sensitivity of a research. The topic under investigation can be sensitive issue prevailing in the society. Researching such issues involve certain degree of psychological discomfort to those involved in the study. A rather well generalised definition of a sensitive social research is: ‘studies in which there are potential

consequences or implications, either directly for the participants in the research or for the class of individuals represented by the research” (Lee & Lee, 2012, p. 3). Although this definition provides wider coverage to various aspects of sensitive research, it still does not address the technical or methodological aspects which can influence the sensitivity (Lee & Lee, 2012).

In the present research, there were several ethical, technical and methodological issues involved which added to the sensitivity. These included reluctance from the respective departments to provide access or security (as the security conditions in Pakistan were worst, police refused to provide the researcher any sort of protection). The psychological impact of recalling traumatic stories and potential psychological disturbance caused at the interview stage. Such issues are detailed in chapter six elaborating on how they were managed or addressed. The other ethical issues, selection of ethically/culturally sensitive research tools and procedures and construction of psychometrically sound protocols are also discussed.

### *The Present Study*

As described earlier, the present study was predominantly concerned with identifying constructive and positive coping strategies which can enhance resilience and wellbeing of Pakistani and British police officers. Given the broad range of research variables (i.e., pre-trauma, during trauma and post trauma), this research was carried out in multiple stages/phases. It was deemed necessary in order to attain maximum information from an indigenous culture where there was no background research statistics available.

To ease readability, this chapter is divided into multiple sections starting from discussing data collection structure, methodological approach and its rationale, data collection philosophical theory and its rationale, pre study phase (conceptualisation phase), development of protocols and their psychometric details, piloting and finally the main survey protocols. The chapter summarises the ethical concerns raised during the field study and how the researcher addressed those challenges.

### *The Problem Statement*

The problem statement refers to the main inquiry of the research (Robson, 2011). Hernon has identified nine attributes of a problem statement (Hernon, 2010).

These include:

1. Clarity and precision (a well-written statement does not make sweeping generalizations and irresponsible statements);
2. Identification of what would be studied, while avoiding the use of value-laden words and terms;
3. Identification of an overarching question and key factors or variables;
4. Identification of key concepts and terms;
5. Articulation of the study's boundaries or parameters;
6. Some generalisation;
7. Conveyance of the study's importance, benefits, and justification regardless of the type of research, it is important to address the “so what” question and to demonstrate that the research is not trivial)
8. No use of unnecessary jargon; and
9. Conveyance of more than the mere gathering of descriptive data providing a snapshot.

(Hernon & Metoyer-Duran, 1993, pp. 82-83)

Any problem statement should contain four components:

1. Lead-in
2. Declaration of originality (e.g., mentioning a knowledge void, which would be supported by the literature review);
3. Indication of the central focus of the study; and
4. Explanation of study significance or the benefits to be derived from an investigation of the problem.

The problem statement for the present study is as follows:

*How do police officers deal with psychological outcomes of their work related traumatic experiences?*

To elaborate further, the increase in crime and terrorism related concerns have raised issues and challenges towards resiliency in present day policing. In context of developing countries, the lack of adequate resources is a great barrier towards improving and ensuring the mental health needs of these personnel. Considering the psychological profile of police personnel from two different contexts, the study is being carried out to explain how indigenous and local variables contribute towards coping and resiliency. By examining what comprises a psychological trauma in both settings, the research will identify ways to enhance resilience by articulating coping strategies adopted by personnel in respective countries. It also looks at the gender, rank wise, and duration of service wise impact of trauma exposure on study variables.

As indicated in the list of attributes, the statement is clear and precise in determining the factors associated with coping and confronting trauma. Moreover, the question has been oversimplified by further investigating the dimensionalities involved in the term “trauma” in the police setting. The exploration is expanded around gathering meaning of need of support and coping in police in the two countries looking at how different geographical or local variables can influence or play their respective roles.

### *Research Design*

Before proceeding towards the research methodology, it is essential to establish an understanding about the components of a research. A research is a scientific and systematic inquiry about an unknown phenomenon (Robson, 2011). It can either be descriptive (qualitative), explanatory (quantitative) or a combination of both depending upon the nature of the investigation. Ideally a combination of descriptive and explanatory methods allows the expansion in the general understanding about the subject matter (Creswell, 2009). A description may add immeasurably to the knowledge about what shapes an attitude, behaviour or an action (Corbin & Strauss, 2008). A good description often provokes the questioning of why leading to the explanation of a certain phenomenon.

A mere description however can be rather abstract and would need further exploration (King & Horrocks, 2010). This justifies the combination of a joint venture of mixed methodology – the prime research design in this study.

## 5.2 Methodological Framework

Another strong aspect of this study is its cross cultural modality. In this design, an exploratory investigation was carried out adopting a mixed method approach to collect data and analysing it with pattern of responses in the two country's police forces. This was done to understand cross national exhibition of trends and traits related to trauma and coping. A unique combination of grounded theory approach allowed understanding of the concept of coping from information emerging from the study itself rather than the pre tested theories or other explanatory models

A diagrammatic presentation of design and conduction of this research (Methodological Framework) is presented as follows:

### *Phase A: Methodological Framework*

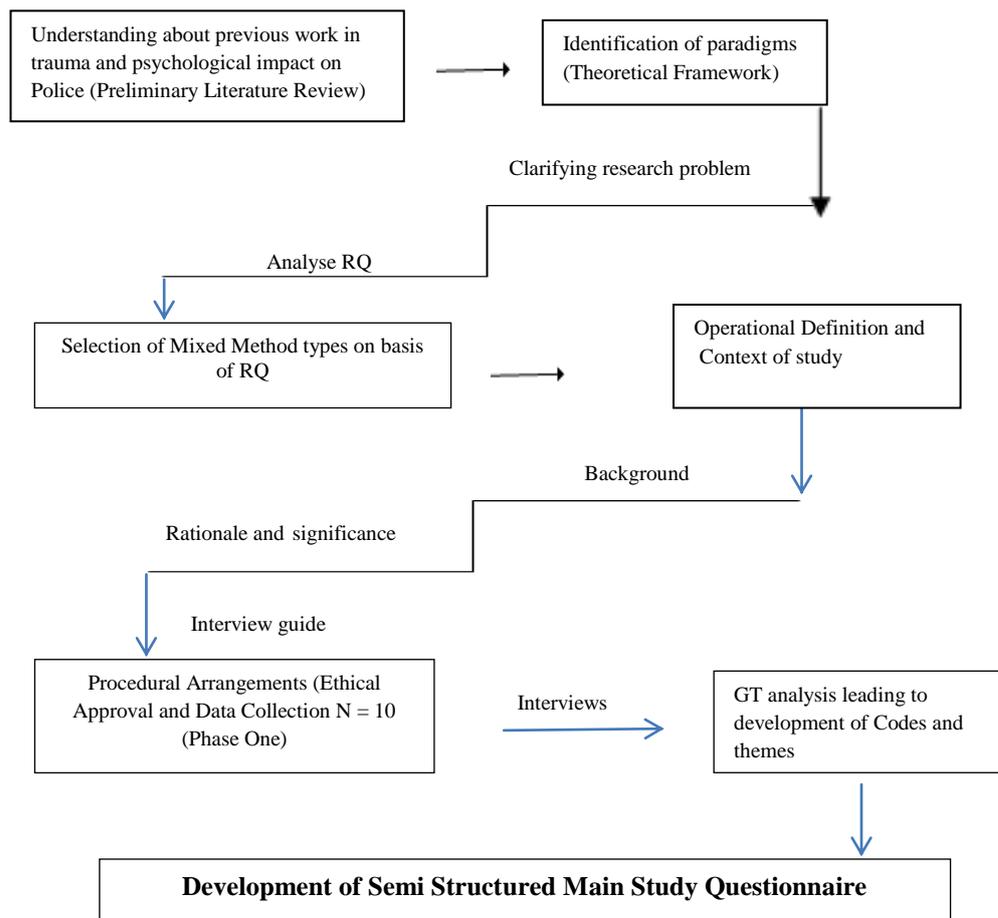


Figure 5-1: Methodological Framework for Phase A

### *Phase B: Methodological Framework*

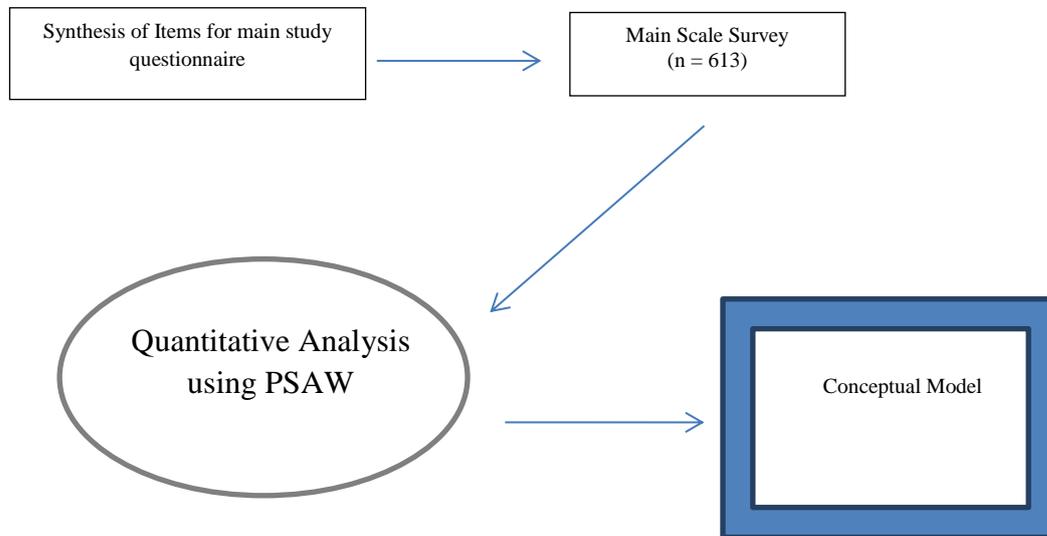


Figure 5-2: Methodological Framework for Phase B

These two phases represent the conduction of the study both in field and data synthesis. Each phase was carried out with specific objectives. For example, the phase one aimed at formulating an item pool for synthesis of the main scale survey (see Appendix D) to address key variables included in this investigation (i.e., trauma components, wellbeing, coping and resilience). The second phase led to the conduction of the main scale survey and the combination of the results from both studies led to the development of the conceptual model (see chapter nine).

#### *Choosing Research Methodology*

A methodology refers to the philosophical framework and the fundamental assumptions of research (Corbin & Strauss, 2008). Mixed methods are a well-known procedure of collecting data (Creswell, 2009) by combining two different yet important types of approaches. A vast number of traditional trauma research used a qualitative approach to explore trauma experiences (Harvey & Bryant, 1999; Regehr & LeBlanc, 2011). As the understanding about the nature of traumatic experiences grew, the need to study its psychological impacts was crucially felt and understood. The independent investigations regarding the number of exposures and their psychological impact using various

psychometrically recommended instruments were carried out. The chapter on literature review includes citations of various famous names in the field of trauma psychology, which used either of these two methods and found it effective. Over the passage of time, the use of multiple methods in order to enrich the data, has gained popularity.

#### *Qualitative approaches to trauma*

Qualitative research has several benefits. For example, it allows the research of the conscious mind (Silverman, 2009). It allows studying what people say and do in their real lives. It incorporates cultural variability in expression and performance. Qualitative study is ideal to understand what people desire, how they feel or what their emotions are surrounding certain issue. It allows the researcher to elaborate on the “why” and “how” of the particular topic. Qualitative research has been extensively used to gain insight into attitudes, behaviours, values, culture and lifestyle. Examples of studies on/with the police include: Chinese attitudes toward police (Wu & Sun, 2009); and the public image of Russian police (Zernova, 2012).

Focus groups, in-depth interviews, content analysis, ethnography and evaluation are among the many formal approaches that are used, but qualitative research also involves the analysis of any unstructured material, including customer feedback forms, reports or media clips (Ereaut & Whiting, 2008). Several researchers have used semi structured interview guide methods to analyse and gather stories about traumatic experiences. In 2003, Regehr, and Colleagues carried out qualitative inquiry into the aftermath of workplace trauma. They analysed 11 interviews and produced qualitative themes to study traumatic experiences and found the method useful (Regehr, Johanis, Dimitropoulos, Bartram, & Hope, 2003).

In another research exploring traumatic experiences of police officers, open ended descriptive questions were added to the main survey and the participants were asked to brief about their most recent professional traumatic experience. The anecdotal accounts were coded and summarised in findings (Kessler, et al., 2005).

#### *Quantitative approaches to trauma*

Usually the quantitative approach is followed to investigate the rate or frequency of occurrence of traumatic experiences or to examine their severity on the basis of the Likert scale (Daniel S. Weiss, et al., 2010). Authors have also investigated the risk and protective

factors towards PTSD (Lilly, et al., 2009) or welling(is this a word or reference?) using standard questionnaires (Tehrani, 2010). Some of the questionnaires are: The Critical Incident History Questionnaire (Daniel S. Weiss, et al., 2010), Davidson Trauma Scale (DTS) (Mason, Lauterbach, McKibben, Lawrence, & Fauerbach, 2012) etc.

### 5.3 Mixed Methods as research design

Mixed Methods is a comparatively new “terminology” which premises on combining, integrating and/or assimilating more than one research (methods or paradigms). Mixed methods is emerging as a new paradigm (Johnson & Onwuegbuzie, 2004), which is more flexible and appropriate for present day research requirements. The trend of composite use of both Qualitative and Quantitative research methods can be traced back to 1950’s (also called the formative period) when researchers brought into discussion the use of multiple methods and combining various research techniques (Campbell-Sills & Stein, 2007). This was followed by debate over paradigms (Bryman, 2008; Marshall & Rossman, 2010). The main argument was that by combining different “research methods” there might be a clash in the philosophical framework, which guides the research. This challenge however does not undermine the merits of using mixed method, which allows the flexibility of paradigm integration.

For the present study, the most relevant definition of mixed methods has been taken from Creswell (Creswell, 2009), who defines it as:

“Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process. As a method, it focuses on collecting, analysing, and mixing both quantitative and qualitative data in a single study or series of studies”

(Creswell & Clark, 2007, p. 5).

Different attributes such as: providing comprehensive evidence for a research question, flexibility to use multiple worldviews/ paradigms, freedom in use of as many research methods as considered necessary, makes it more relevant for the researchers to premise their studies on Mixed Methods. In the present study, the researcher wanted to begin with exploring personal reflections and stories (using Interview Method) and later using a Large Scale Survey, to understand the impact of traumatic events exposure on psychological

wellbeing and Resiliency. Mixed Method is most relevant as it has been widely used in trauma research (Creswell & Clark, 2007; Henry, 2004; Tashakkori & Teddlie, 2003). Most of the researchers prefer combining qualitative and quantitative methods mainly because it provides more comprehensive understanding about the research problem and allows validity of findings (Maxwell, 2005).

Mixed methods legitimise the flexible use of research methods according to research questions thereby rejecting dogmatism. This pragmatic approach aims at obtaining and maximizing the utility of information obtained by using multiple methods. It is, however, important for a researcher to be aware of individualistic attributes of both qualitative and quantitative methods.

#### *Strength/Weaknesses of Mixed Method Design (MMD)*

There are several benefits of using MMD such as:

1. Deploying multiple means of information (such as using words, pictures or narratives) can enhance meanings towards understanding of a phenomenon
2. A broad range of research questions can be answered
3. It provides stronger evidence for an interpretation by process of “integration” or “convergence”
4. Each method can be used to inform the next stage/ phase of the study

On the other hand, it is also:

1. Extensive and time consuming
2. Requires familiarity with both Qualitative and Quantitative research designs
3. It can be more expensive
4. Involves challenges related to theoretical framework i.e., use of various theoretical paradigms can contradict each other and thus may become challenging for the researcher to defend.

Regarding the issue of which research approach is more appropriate, Robson (Robson, 2011) has argued that an intermediate position can be taken into account where relevancy to the research questions has to be considered. Increasing popularity of this method among researchers suggests that this is more appropriate method for studies providing rich information which is both reliable and valid.

### *Combining the two methods: Mixed Methods*

In the majority of recent researches, the innovative methods of studying trauma experiences have been introduced. These include most famous and widely used “Mixed Methods”. Mixed methods approach not only combines the two above cited modes, but also brings together merits and strengths of both approaches in one place this making the information more rich and understandable. Famous names in mixed methods trauma research are Creswell (Creswell, 2009), Bryman, Tashakkori and Robson (Robson, 2011).

### *Rationale of using Mixed Methods*

Although both Qualitative and Quantitative methods are quite distinct in terms of their approach, the present study shares the assumption that much can be gained from considering the merits and demerits of both approaches in particular context of the research. This study therefore, takes the mixed method approach (Creswell, 2009) and will consider the usefulness and appropriateness of various alternative procedures as described in grounded theory (Corbin & Strauss, 2008).

Regarding the issue of what kind of research approach is more appropriate; authors have argued that an intermediate position can be taken into account which means blending qualitative and quantitative approaches, wherever appropriate and necessary (Corbin & Strauss, 2008; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

### *Advantages and Disadvantages of method*

The present exploratory study follows guidelines from adapted versions of open coding, axial coding, and selective coding procedures suggested by Corbin & Strauss, (2008) in its initial phase. This approach allows the researcher to extract themes and ideas from the data/findings of the study. For the specific purpose of exploring in-service experiences in this study, the different theoretical approaches to the phenomenon will be discussed in a later part of the study. The themes generated from the Interviews were used to develop a questionnaire which was administered on a large scaled survey.

## 5.4 Theories and theoretical paradigm

Theories are an integral part of any research. They not only serve as building bridges between different emerging ideas and concepts in a research, but also help to provide

“conceptual framework” or a meaningful, logical explanation of why and how things occur as they appear to be.

Theory is defined as:

“A proposed explanation of a phenomenon, or sets of occurrences, or of relationships”

(Robson, 2011, p. 534).

It is a system of generalised statements that are logically linked together to understand or predict human phenomena. In a research, the theory provides an explanation of what is going on in the situation; phenomenon or whatever is under investigation. In this research, an inductive approach is followed i.e., seeking to build a theoretical explanation of what the traumatic experiences are and how they shape the individual’s psychological reaction/positive growth (through coping). The analytical outlook will be oriented towards “positive psychology” as the positive outcomes of dealing with traumatic situations such as resiliency must be brought forward and discussed in terms of therapeutic strategy. As most of the trauma research looks at the negative outcomes of the post trauma stress and barely a limited number of studies have accommodated how the individual assimilates and/or accommodates the unpleasant impacts and converts them into positive energy. There is a need to discuss positive psychological states in the time of emergency or trauma and its impact on coping. This aspect provides strong rationale and originality of this cross national study.

#### *Understanding Positive Psychology paradigm*

Positive psychology is the study of the nature and circumstances which contribute towards the positive growth in an individual (Gable & Algoe, 2010). Under the umbrella of health psychology, studying positive institutions such as self-motivation factors, resiliency, integrity and self-control provide the meaning and purpose to the lives of individuals under adversity and such an approach towards life fosters better communities such as being responsible and tolerant (Seligman, 2002). Positive Psychology is emerging as a new paradigm, getting increasing popularity in trauma resilience. Researchers such as Arnetz (Arnetz et al., 2009) and Mostert (2006) used positive psychology perspectives to study the opposite of burnout in South African Police personnel so as to argue that the entire continuum of work-related experiences, ranging from negative (burnout) to positive (work engagement) can be covered using this perspective (Mostert & Rothmann, 2006).

In this research, both negative and positive aspects of trauma reaction, psychological adjustment and coping will be discussed considering a positive psychology paradigm.

### 5.5 Considering Conceptual Framework

As discussed earlier, a theory about what is going on, of what is happening and why, is sometimes referred to as a conceptual framework (Motsi & Masango, 2012). This term is at times used broadly in terms of:

“System of concepts, assumptions, expectations, beliefs, and theories that supports and informs your research”

(Maxwell, 2005, p. 33)

First step in any qualitative (or quantitative) research is to develop its conceptual framework. Conceptual framework provides a guideline to carryout research, determine the research questions and explore the relevant literature review to reach towards any conclusion. As in the present study, the approach is very much inductive, iterative and involves multiple methods of exploration, it is important to describe how the researcher will proceed with the development of a conceptual and theoretical frame work.

A conceptual framework reflects on the following questions:

- What is going on with the issues, settings or people which one plans to study?
- What theories, beliefs, and prior research findings will guide/inform the research?
- What literature, preliminary studies and personal experiences will one draw in order to understand the phenomenon under investigation?

(Maxwell, 2005, p. 4)

To answer these questions, this study has:

1. Provided mental health situation in the country’s police force and provided examples to suggest the level of concern amongst the authorities about psychological profiling and its needs.
2. As the earlier description (see chapter one) has detailed the current scenario of mental health and problems in the Pakistani police leading to several mental health consequences in the force.
3. The intention to include both Pakistan and British police officers as a sample has helped to expand on the understanding of the psychological sequel of dealing with

various types of traumatic experiences and healing or coping in culturally defined practices and norms. For example, how does the nature of trauma influence the emotional reaction? How do the indigenous practices modify the emotional reaction?

4. The aspect of doing qualitative interviews adds to the originality of the research since personal accounts or stories have been used as a main source of themes for study analysis.
5. Used inductive approach whilst clear information about the study variables and their inter relationship is not well studied in Pakistan, exploring using Grounded Theory justifies with the indigenous nature of the research allowing a synthesis of information from the enriched data itself.

## 5.6 Research Methods

Considering a limited amount of empirical studies on psychological robustness and its relationship with traumatic events exposure in police at the beginning of this PhD, the research at hand follows inductive Grounded Theory (GT) approach developed by Strauss and Corbin (1998). According to the theory, the value of GT approach “lies in its ability not only to generate theory, but to ground that theory in the data” (Strauss & Corbin, 1998, p. 8). Thus GT appears to be the particularly appropriate strategy for theory development when the topic is less researched. At the same time, given the one sidedness of predominant quantitative approaches in traumatic incidents research, it seemed appropriate to combine qualitative methods in order to reduce the “risk of inappropriate certainty” (Lösch, 2006, p. 136).

## 5.7 Grounded theory approach: Methodological Approach

The present study draws its methodology on Grounded theory frame work by Strauss and Corbin (1997) which mainly stresses on suspension of any interpretive assumption before data conduction. The idea is the generation of theory from the data which is grounded in the research. This procedure is highly systematic and allows constant comparison (method of analysis) to generate concepts, ideas and thereby leading to construction of theoretical framework.

### *Rationale for using GT*

The reason this framework of analysis has been selected is because it was relevantly flexible and allows constant comparison which was helpful in refining research questions for the study. Moreover, a large number of trauma researches are quantitative or empirical and there are quite a few descriptive studies following the GT approach. In Pakistan, this would be the first study to explore traumatic experiences and reflections of personal life stories. The grounded theory has been found to be more suited for exploratory analysis (Binder & Edwards, 2010). Thus GT appears to be the particularly appropriate strategy for theory development when the topic is not well researched (Strauss & Corbin, 1998).

### *Introduction to GT*

Grounded theory (GT) is a “general inductive method possessed by no discipline or theoretical perspective or data type” (Glaser, 2005, p. 141). It was discovered by Glaser and Strauss (1967) and emphasised on the emergence of theory “within” data where it is “grounded”. The main idea was to allow concepts and ideas to “emerge” from the data, therefore making it a more indigenous approach. Although Glaser (Glaser, 1978b) has extensively explained, in detail, the concepts of theoretical sampling, coding and memos; the approach by Strauss and Corbin (1990) provides more comprehensive description of analysis and guidance to the novice researchers (Heath, 2006). A fundamental belief of GT is that the knowledge may be increased by generating new theories rather than analysing data with the existing ones (Heath, 2006).

In the present research, the concepts are explored in the actual context and empirical data within the study helps to reach towards conclusion rather than the literature. Consequently, the emerging result is presented either as a hypothesis, a model or as an abstract conceptual theory (Hallberg, 2010). The theory is built up around a core category and related categories. In Glaser's words, the aim of GT is to “generate a theory that accounts for a pattern of behaviour which is relevant and significant for those involved” (Glaser, 1978a, p. 93). Hallberg describes the GT analysis as more conceptualizing as compared to being descriptive. Thus to generate a GT requires creativity and conceptual thinking (Hallberg, 2010).

In trauma research, a limited number of Police studies have adopted this methodology to explore traumatic experiences. Usually the investigators have used either checklists of trauma events or questionnaires to empirically/ numerically explore the nature and impact

of these experiences (Weiss, et al., 2010 Davidson & Moss, 2008). This research has provided a new and unbiased perspective towards studying this phenomenon.

### *Research Relevance*

The present study is aimed at exploring the real life experiences of police personnel who have been performing critical duties involving traumatic content, to examine how they manage the psychological impacts and to look at the resiliency and positive growth following trauma experiences. Grounded theory was found to be more relevant as this kind of study has never been conducted on Pakistan Police. This would provide baseline information about Police mental health and trauma experiences. This study can provide a guideline to carry out further research to understand how the mental health of police personnel can be improved to increase overall efficiency.

### *The Process of Building Grounded Theory*

Table 5-1: The Process of Building Grounded Theory (Pandit, 1996)

<b>Phase</b>	<b>Activity</b>	<b>Rationale</b>
<b>Research Design Phase</b>		
Step 1	Review of technical literature	Definition of research question Definition of a priori constructs
Step 2	Selecting cases	Theoretical, not random, sampling
<b>Data Collection Phase</b>		
Step 3	Develop rigorous data collection protocol	Create case study database Employ multiple data collection methods Qualitative and quantitative data
Step 4	Entering the field	Overlap data collection and analysis Flexible and opportunistic data collection methods
<b>Data Structuring Phase</b>		
Step 5	Data ordering	Arraying events chronologically

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**Data Analysis Phase**

Step 6	Analyzing data relating to the first case	Use open coding Use axial coding Use selective coding	Develop concepts, categories and properties Develop connections between a category and its sub-categories Integrate categories to build theoretical framework All forms of coding enhance internal validity
Step 7	Theoretical sampling	Literal and theoretical replication across cases (go to step 2 until theoretical saturation)	Confirms, extends, and sharpens theoretical framework
Step 8	Reaching closure	Theoretical saturation when possible	Ends process when marginal improvement becomes small

**Literature Comparison**

Step 9	Compare emergent theory with extant literature	Comparisons with conflicting frameworks Comparisons with similar frameworks	Improves construct definitions, and therefore internal validity Also improves external validity by establishing the domain to which the study's findings can be generalised
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### 5.8 Participant Pool selection and recruitment

As it has been detailed earlier, the participant selection was based on theoretical sampling which refers to sampling until saturation occurs.

#### *For Phase One: Pre Study Phase*

Pre study also refers to conceptualisation activity (Boulangier, Dewé, Gilbert, Govaerts, & Maumy-Bertrand, 2007) where the core requirements that satisfy the respondent/or target participants is established (Randers, 1980). It also assists in identifying any risks involved with the project. This phase is similar to the preliminary investigation yet it does not include all elements required in the actual study (Craig, 2009). In the present study, an interview guide (see appendix C) and consent form (appendix B) information sheet to the participants and gatekeepers (appendix A) about research aims and objectives were supplied.

Participants in the first phase study included ten police officers; 5 each from West Yorkshire region of England, and Punjab region of Pakistan and a qualified psychologist in each country.

The inclusion criteria for the first phase of the present research states that the police officer

1. Must be currently employed (not retired),
2. Must be employed for at least 20 years,
3. Police officers serving in posts that have brought them into contact with traumatic/critical incidents.

For the large scale survey, the participants could be:

1. Fresh Recruits with less than 1, 3, and 5 years of service experience
2. Several more experienced officers,
3. Desired age is 18 years and above (i.e., year of recruitment).
4. Including expert opinion: Psychiatrist View

This phase also included an expert opinion related to mental health issues in police personnel. The psychiatrist from the UK was well qualified and affiliated with the Police while the Pakistani Psychiatrist was independently based and had relevant expertise in dealing with trauma cases. The anecdotes of both senior police officers and psychiatrists were used to guide towards further steps in the research.

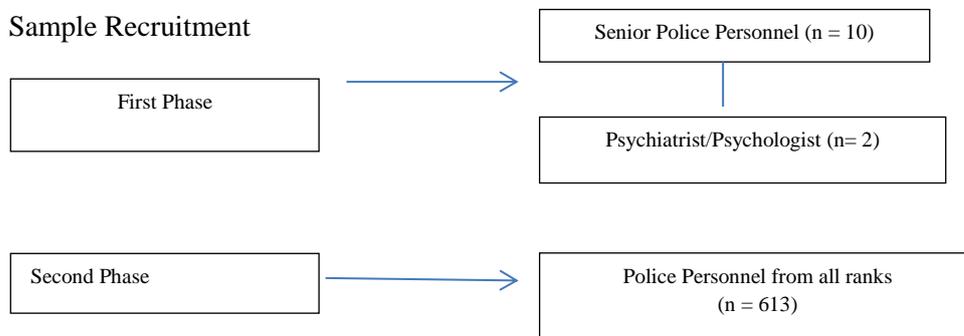


Figure 5-3: Detail of Study sample according to phases

### 5.9 Rationale and Procedure for pre study phase

The study intended to undertake in-depth interviews initially with five experienced police officers (from each country) which were followed up by a large scale survey (n= 613). The researcher also carried out a detailed interview with the Psychiatrist associated with the UK police department and a Psychologist in Pakistan to get expert opinion about the

research question. For the purpose of contact, the chief police officer (CPO) based in Lahore, Pakistan was contacted who enabled the researcher to hand out letters to the potential participants. The researcher went to the individual police stations, and met with the officer in charge at each one and discussed how best to contact all the police based there. The Rawalpindi police station comprises of 24 police stations while the Lahore police station has 135. Selected police stations from both countries were approached based on convenience of approach.

#### 5.10 Sampling Strategy

The present study used theoretical sampling based on grounded theory methodology. Theoretical sampling is referred to as a “hallmark of GT methodology” (Draucker, Martsolf, Ross, & Rusk, 2007). This type of sampling is a most commonly used form of non-probabilistic sampling, and the sample size typically relies on the concept of “saturation,” or the point at which no new information or themes are observed in the data (Guest, Bunce, & Johnson, 2006). This type of sampling is extremely beneficial for emerging findings as described by Draucker (Draucker, et al., 2007). A total of ten participants showed a willingness to participate in the initial interviews. The interviews finished at saturation (when no further themes or information were thought to be obtained). For the extended Survey (see appendix D), an open option was kept, to gather as large a sample as it is possible to ensure representativeness.

#### 5.11 Determining equivalency of ranks

The equivalency of ranks was determined by comparing the role responsibilities and requirements. The following attributes were considered equivalent between ranks of both forces for the purpose of facilitating the analysis.

1. IG (Inspector General, Pakistan) considered as equivalent to the Police Chief Constable on the basis of the following roles:

Being the overall person in-charge of the provincial police advisor to the provincial government and all the police affairs and is responsible for the following:

- According to the constitution/law protection of life, property, and liberty of citizens.
- Promotion and preservation of public peace.

- To ensure rights and privileges, under the law, of a person taken in custody are protected.
- To prevent the commission of offences or public nuisance.
- To collect and communicate intelligence affecting public peace and crime in general.

2. Additional IG (Assistant Police Chief Constable UK)

He assists IG or CCPO in efficient performances of his duties as it may be considered appropriate, along with the consultation of IG/CCPO.

3. CCPO/DPO Pakistan as equivalent to the Chief Superintendent, UK

Posted by IG, CCPO at capital city of province, DIG RANK

4. District Police Officers (DPO) in each district

Responsible as the head of district police, CCPO/DPO

5. Superintendent of the police

The superintendent of Pakistan is considered equivalent to the Superintendent of the U.K in terms of the following duties:

- Implements policies of CCPO / DPO, acts as Head of Division.
- He supervises 3-4 circles (posts/areas).

6. Deputy Superintendent (DS)

The superintendent is responsible for implementing the policies of higher headquarter in the police department. S/he supervises investigation team of a circle/area, Station House Officers and is Head in charge of police stations. S/he is also responsible for actual implementation of law enforcement. DS executes all the police law and order.

## 5.12 Expert Sampling for Interviews

For preliminary interviews, expert sampling (Stewart & Stasser, 1995) was used which involves the assembling of a sample of people with known or demonstrable experience and expertise in some area (in the present case, experience in dealing with traumatic situations). This was done primarily to get first-hand information about the trauma experiences from a sample of both Pakistani and British police officers. The criteria were to have service experience of more than 20 years and the officers should be from a single crime division (i.e. Homicide Inquiry/CID). The only purpose to restrict preliminary interviews to CID was to be specific and focused. Different working departments might have a different level and type of exposure, which is not the objective of this study.

## 5.13 Analytical Tools in Mixed Methods for Present Research

The two deployed were:

1. Interview method
2. Survey Method

### *1. Interview Method*

In order to meet the preliminary objective of exploring personal trauma exposure incidents and their impact, the Interview method was considered most relevant. Interviews are an effective qualitative research method which allows a subjective account of information to be registered. The interview method is extensively used in mixed method research and their use has been found to be effective (Johnson & Onwuegbuzie, 2004).

In this study, the semi structured face to face interviews were based on self-devised interview guides made to explore negative experiences, range of negative experiences and their impact of psychological and social wellbeing of the personnel. Particular attention was given to understand individual negative experiences encountered and emotional reactions attached. The five Police officers in England and Pakistan police force were approached through personal contacts from the Association of Chief Police Officers (ACPO) in the respective departments.

## *2. Use of Interview Method in Trauma Related Research*

The interview method has been widely used with trauma survivors and it has been considered a very effective method of exploring personal experiences which are highly emotional and sensitive. The issues of confidentiality have often been raised in trauma focused interviews (Schwerdtfeger, 2009) considering that there is a possibility of confidential information being compromised. This risk can be minimized by explaining the aims and objectives of the study in clarity to the participants. Schwerdtfeger carried out an investigation to study the methodological differences associated with perceived discomforts and benefits among pregnant women participants in a two-phase, trauma-focused research study. He found that both written survey and personal interview methods were well tolerated by pregnant women (Schwerdtfeger, 2009). This might amplify that the combination of such methods does not impart any discomfort in these types of studies. It is, however not obsolete and extreme care should be observed regarding sensitivity and discomfort.

### *Maximising participation*

The following steps were taken to ensure that the participation is increased

1. The University logo was used which served as a certain source of identification of the researcher and it helped to remove uncertainty about the research.
2. The information sheets clearly stated the research aims and objectives. The potential harm and benefits of participations were also enlisted.
3. For email surveys, the reminding emails were sent twice.
4. Help lines /point of contact with the researcher, were provided.
5. Endorsement with the University of Huddersfield (for British sample) and with both Fatima Jinnah Women University FJWU (Pakistan) was made.
6. Identity of the researcher was made available to the participant and chief organisation.
7. Point of contact was provided for further information.
8. No incentive was ensured in this study

According to Sales and Folkman, ensuring confidentiality and informed consent improves willingness to participate in the research activity (Sales & Folkman, 2000).

### *3. General Interview Guide Approach*

The guide approach is intended to ensure that the same general areas of information are collected from each interviewee; this provides more focus than the conversational approach, but still allows a degree of freedom and adaptability in getting the information from the interviewee.

In the present study, a semi structured interview guide was developed in order to facilitate a systematic decision process and to use it for category genesis. A comprehensive literature review was conducted prior to the development of the Interview Guide. This involved gathering prior research work in related areas from 1997 to date. Almost 700 research papers/journal articles and books were reviewed. As the information from Pakistan was limited, it was considered more appropriate to include open ended items in main scale survey questionnaire to get more subjective views of the experiences.

#### *Components of Interview Guide*

The interview guide comprised of an unstructured series of questions or themes which the researcher was interested in exploring. The basic idea was to understand what kinds of events are perceived as traumatic and how the officers deal with harmful effects (such as anxiety or depression). This was done by exploring the personal narratives and stories of the senior police officers who were actively involved in criminal investigations. The interview guide included the following broad questions which were subject to further probing. There was no strict sequence of questioning.

#### *Interview Guide items structure*

The interview guide covered the following questions:

- 1 Any experience/s which was/were emotionally demanding for you?
- 2 Probe for specific emotions/ feelings attached with the experience
- 3 Why the experience was unpleasant (if)?
- 4 How you dealt with it?
- 5 How much time it has been since that particular event (if)?
- 6 Personal psychological growth and wellbeing
- 7 How do you feel about your current profession?
- 8 Are you satisfied with police work as a profession (reference to their own current duties?)

- 9 What are some of the psychological strains you feel are there with your work?
- 10 How do you feel about:
- 11 Physical Wellbeing
- 12 Psychological/social Wellbeing
- 13 Your perception about your duties and position??
- 14 Psychological Needs and awareness
- 15 Psychological Support

The interview normally started with a brief introduction about the research. The conversations guided the researcher each time to include or exclude the items. These themes are summarised in figure 4-4. The interview Guide has been used in various trauma researches aimed at exploring trauma experiences. The use of the Interview guide is flexible and allows better understanding about the phenomenon under investigation.

#### 5.14 Research Protocols for Survey Phase

A series of protocols were included in the inventory for assessing traumatic experiences and psychological changes in police officers.

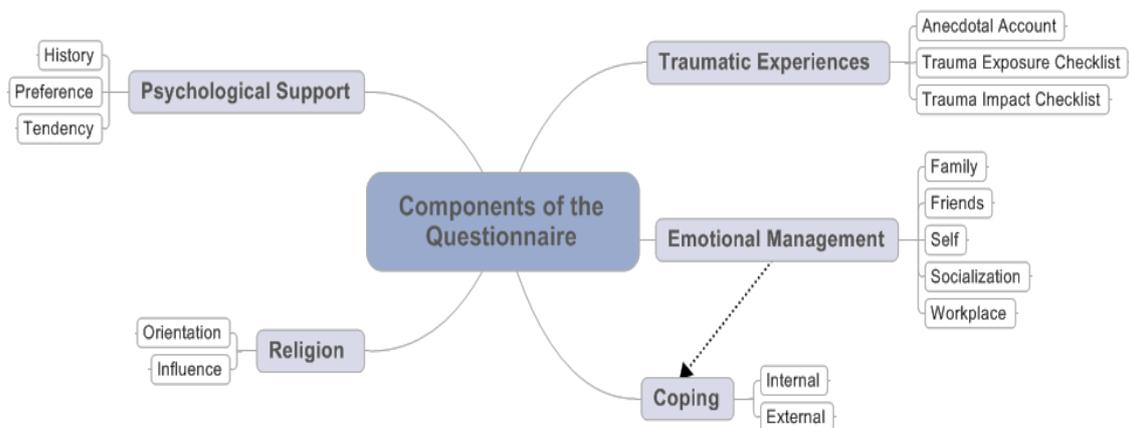


Figure 5-4: Components of Self Devised Questionnaire

This figure illustrates the components of the questionnaire designed in the present study. There were five components in all namely the traumatic experiences, emotional channelization or management, coping, religion and psychological support.

The following table explains the relevance of protocols with the research questions.

Table 5-2: Relevance of protocols with the Research Questions

Research Question (RQ)	Protocol for assessment	Relevance to RQ
What are the types of traumatic experiences in police work?	Interviews (Phase I)/ Self developed semi structured questions (Phase II) included in the protocol	The items required brief description of the incident/event considered traumatic for the individual. This was followed by a series of trauma events/incidents as obtained in phase one, to be rated in terms of frequency and psychological impact
What is the psychological impact of dealing with traumatic situations in police work?	A section was included to measure trauma exposure (self-reported items) in terms of frequency and psychological impact on Likert scale of “severe to none”	The items were carefully selected after analysis of interviews and included various traumatic incidents as reported in Police literature and Interview from Phase I
How do police officers cope from the psychological impact of traumatic experiences?	GHQ-12 Connor-Davidson Resiliency Scale (Urdu Version) Self-Report items on Various aspects of Coping	The GHQ has been widely used in trauma studies, so as the Resiliency Scale. Both of the questionnaires assess personality traits and mental health which was considered equivalent to how the officers dealt with their trauma reactions (Empirical evidence has been provided in this chapter

### 1. Self-Report Inventory

The Scale included the following sections:

#### *Descriptive narration of personal experiences of unpleasant incidents and reactions*

This section required participants to reflect on any unpleasant incident which they could recall. They were asked to recall the year of the incident to estimate the duration and intensity of impact. This qualitative question assessed the personal stories and was designed in particular to get a rich understanding of the personal trauma encounters. The analysis was similar to interviews i.e. as provided in GT guidelines (Strauss & Corbin, 1998).

#### *Critical Incidents (Traumatic Events), their frequency and psychological Impact Scale*

This section comprised of a list of critical incidents or events which were considered traumatic in a prior study (Phase I). An additional item was included to list any other item

which was not included in the section. The items included different trauma experiences such as Burns/Scars, Dead body of child/adult, homicides, sexual assaults etc.<sup>17</sup>

#### *Trauma Effects Management Scale*

The items in the section included themes such as religious orientation, personality traits, emotional reactivity/control, and support network (Occupational, Social and Personal). These items were carefully designed to explore how religious orientation and various coping strategies were interlinked to mental health and trauma exposure impacts.

#### 2. General Health Questionnaire (GHQ-12) (D. Goldberg & Williams, 2006)

The GHQ is widely used across several cultures and populations (De Jesus Mari & Williams, 1985; Holi, Marttunen, & Aalberg, 2003); Holi, Marttunen, Aalberg, 2003, (Ahmer, Faruqi, & Aijaz, 2007; Minhas & Mubbashar, 1996). It has been widely used in trauma literature to get a general mental health index (Hull et al., 2003; Montazeri et al., 2005; Suhail et al., 2009; Syed, Zachrisson, Dalgard, Dalen, & Ahlberg, 2008). For the present study, the scale was included to get baseline information about the mental health of the participants. The translated Urdu version scale was used in the present study (Minhas & Mubbashar, 1996). The GHQ 12 is a validated version in Pakistan (Ahmer, et al., 2007) and has been used with multiple clinical populations (Shoukat et al., 2010), tuberculosis patients (Husain, Dearman, Chaudhry, Rizvi, & Waheed, 2008; Jia et al., 2010).

Since its development, the GHQ has evolved into several versions such as the GHQ-30, the GHQ-28, the GHQ-20, and the GHQ-12. For the present study, the short form of GHQ i.e. (GHQ-12) was used to assess general mental health of Police Officers in the UK and Pakistan. Both English and Urdu versions were employed in the study. The reliability index<sup>18</sup> appeared to be ( $\alpha = 0.6$ ) in the present sample.

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<sup>17</sup> It is particularly important to highlight here that these items were included from the analysis of the interviews and although some of the items can be found parallel to other scales available, this was considered more beneficial and representative for the current population in the study.

<sup>18</sup> The Alpha reliability (coefficient alpha) was carried out to calculate reliability of the scale using total scores and items

### 3. Connor-Davidson Resiliency Scale CD RISC (Connor & Davidson, 2003) (Original and Translated Version)

The resiliency scale was selected to assess personality traits which pertain to emotional control and personal robustness. This was included to assess positive post trauma growth.

The scale was used to assess robustness and emotional control, as part of the coping process. The scale permission was obtained from authors and later it was translated to be used in Urdu for the Pakistan population.

The CD RISC is a reliable and valid instrument constructed in order to evaluate the resiliency. Resiliency has been defined as the “individual’s ability to thrive despite adversity”(Campbell Sills & Stein, 2007). The scale has been widely used in post trauma studies due to its psychometric strength (Connor, 2006; Connor & Davidson, 2003; Windle, Bennett, & Noyes, 2011). This scale has been translated and adapted in languages other than English. For example Chinese and Taiwanese version of CD RISC have been published (KaraIrmak, 2010a; Khoshouei, 2009; Yu & Zhang, 2007).

CD RISC is a ten item scale measuring ability to cope from stressful events. Respondents are required to rate each item on a scale from 0 (not true at all), to 4 (true nearly all the time). The higher the scores are, the greater the resiliency. In the present study, the alpha reliability was found to be 0.8

There are a number of scales available on Resiliency such as The Resilience Scale for Adults (RSA), the Sense of Coherence scale (SOC), the Hopkins Symptom Checklist (HSCL), and The Trauma Resilience Scale (TRS). The reason for choosing the Connor David scale was due to its high statistical strength (Yu & Zhang, 2007).

Scoring is done on the basis of median scores which were used as a cut off point. The score ranged from 10 to 40. A greater score indicates higher resiliency or ability to stand still in terms of adversity.

### 4. Demographics

All participants were asked to complete the questions related to age, gender, rank and number of years of service. Each variable was coded and categorized in SPSS for further analysis.

### *Justification for Using Self Report Inventory*

Using a self-report inventory is an innovative procedure for collecting relevant information; the primary reason was cultural factors. Since trauma exhibition is considerably affected by cultural plasticities, values and religious beliefs, it is always ideal to include a self-reporting questionnaire to bring forward indigenous approaches to conceptualize the phenomenon under investigation. The questionnaires were administered in order.. Using information from within the study is the gist of Grounded Theory. The data emerged from interviews was further nourished in the survey to get better understanding about the themes obtained from the interviews.

#### 5.15 Development of the Self Report inventory

The self-developed scale contained items which underwent checks for validity and reliability. After the interview's transcript analysis, the themes and links were developed. It was observed that although trauma experiences related to both police forces (i.e., England and Pakistan), however, the personal experiences was quite distinct. The influence of local conditions such as violence and terror in Pakistan was reflected in their trauma experiences and perceptions. Similarly coping strategies were culturally shaped and influenced.

Important themes guided the researcher towards further investigation into trauma experiences according to rank and gender. Therefore a comprehensive assessment and profiling was decided (see figure 4-5). The items included in the inventory were taken from the interview transcripts and personal stories. The items were selected and evaluated by three experts. The structure of the questionnaire is presented as follows:

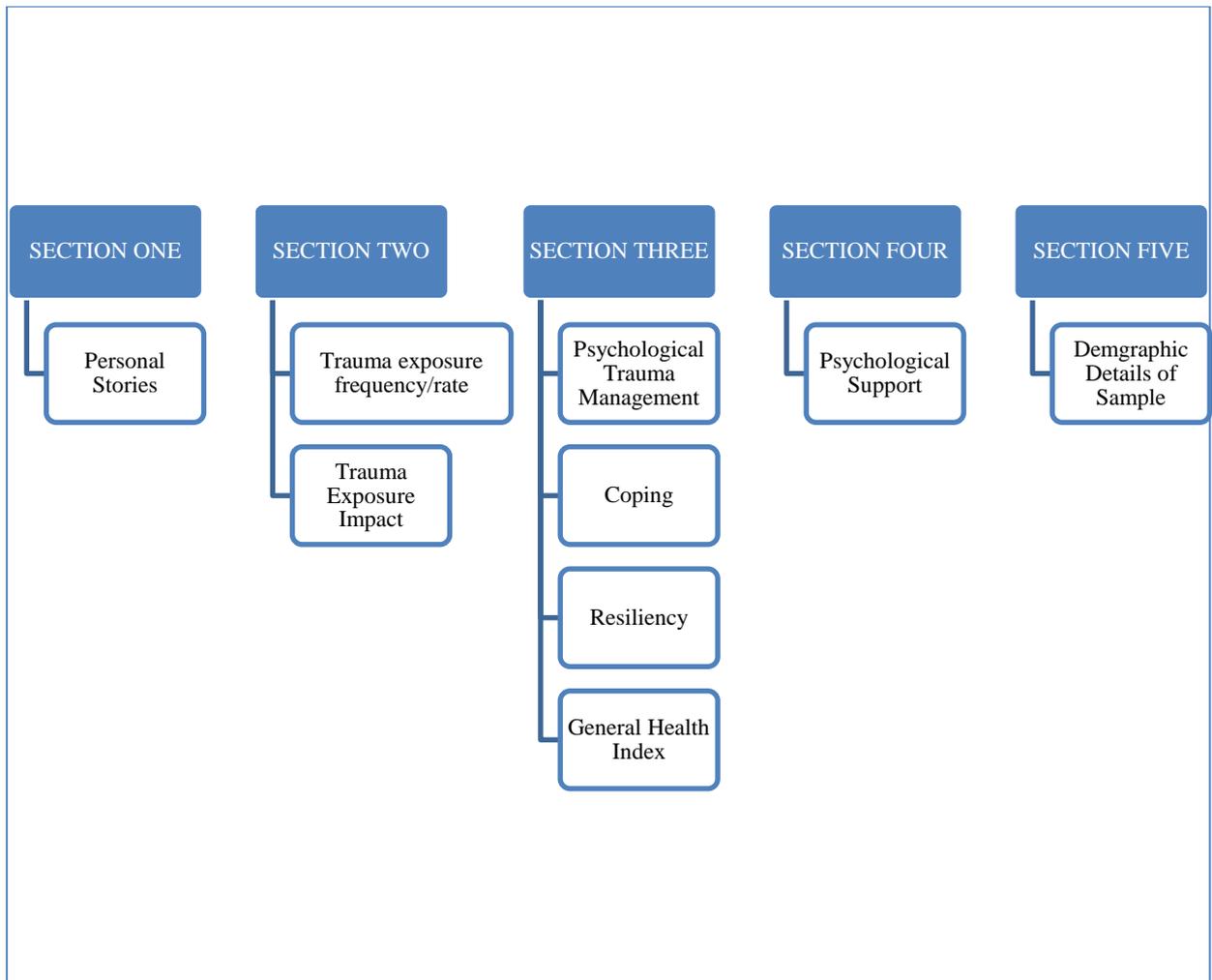


Figure 5-5: Initial Structure of the Questionnaire

### *Judges Ratings*

In order to get an estimate of construct validity, the questionnaires were sent to four experts: A trained psychiatrist affiliated with the WYP Pakistani psychologist (trained)<sup>19</sup>, a bilingual<sup>20</sup> subject expert and two professors in psychology from each country were asked to assess the following:

1. Items relevancy to objectives
2. Grammar Structure
3. Ability or likelihood of a response
4. Questionnaire format and appropriateness
5. Wording Appropriateness

<sup>19</sup> No psychiatrist was formally affiliated with the current police service in Pakistan

<sup>20</sup> Efficient in English and Urdu comprehension

6. Appropriate Instructions
7. Gender /Ethnic Biasness
8. Appearance and Layout

Sample of one of the judges' ratings is as follows:

Items	Item relevancy to objectives (/5)	Item grammar and structure (/5)	Ability or likelihood of a response (/5)	Questionnaire format appropriateness (/5)	Wording appropriateness (subject expert) (/5)	Appropriate instructions (/5)	Gender bias (/5)	Ethnic bias (/5)	Appearance/Layout (/5)	Additional comments
1	5	3	5	4	4	4			5	Check spellings – capital letters.
2	5	5	5	5	5	5			5	
3	5	4	4	5	5	5	possible		5	Check spellings – capitals
4	5	4	4	5	5	5	Possible		5	
5	5	5	4	5	5	5	Some gender bias – women may respond stronger to incidences such as rape?		5	
6	5	3	3	5	3	3			5	Perhaps re-word. Wording a little unclear.
7	4	5	5	5	4	5			5	Is it belief in God or act of prayer that leads to increased resilience? This may influence question/answer
8	4	5	5	5	4	5			5	Check spelling – placing of apostrophe
9	5	4	5	5	5	5			5	Perhaps consider re-wording 'e'
10	5	4	5	5	5	5			5	
11	3	4	5	5	5	5			5	Do you want to specify whether it was a work related incident that caused the individual to seek help? Or

Figure 5-6: Expert Opinion Checklist

The average rating for each checklist was 4 (out of five). Few items in the inventory were changed or replaced after review. As it is clear from the expert opinion, the wording and specification of the meanings were carefully drafted. The new version was again sent to the Judges for final approval. This final version of the questionnaire was then translated into Urdu for the Pakistan Population.

The procedure for the translation is discussed as follows:

#### 5.16 Translation of the Inventory

The standard "forward-backward" procedure was applied to translate the questionnaire from English into Urdu. The inventory (including all protocols) was translated into Urdu (Local Pakistani Language) to be used in Pakistan since English was not well understood and comprehended in all levels and ranks of the Police. The translation guidelines were consulted from Anastasi (Anastasi & Urbina, 1982). Further sections will elaborate on the procedure involved in the translation and how the validity / reliability of the scales mentioned above, was obtained.

##### *Process of translation*

The items in the self-report inventory were translated by the researcher herself. The English version was developed by three experts in the subject and the language. This process was referred to as "expert rating" and served as establishing validity to the initial process (face validity). Furthermore, the back translation process was used which involved translating from English to Urdu and then back to English to see consistency.

#### 5.17 Pilot Study

The Urdu version was subjected to a pilot study to assess its validity and reliability. The inventory was administered to 15 volunteers (7 men and 8 women). The detail results of the pilot study are discussed in the next chapter. However, the reliability scale was valid and the reliability index was .07. The results are elaborated in chapter seven.

#### 5.18 Procedure

Since the study involved two stages, a description has been provided for both steps separately to explain how the procedure was carried out in intervals. The basic purpose of doing the study in two phases or stages was to explore a baseline level of understanding about traumatic experiences in Pakistan Police due to the lack of published literature.

##### *Procedure for Interviews*

Each participant was briefed about the study, its aims/objectives and significance. The participants were clear that they could stop the interview process at any stage, if they were uncomfortable. All interviews were tape recorded except for the Pakistani Interviews,

where the participants were unhappy about being recorded. Primary concern was that already the police are under criticism by both the community and media and therefore their hesitation was justified after their criticism of the Sri Lankan team<sup>21</sup>'s attack and poor security measures taken by the police. The participants however agreed to have their interviews recorded in note pads. This was done at their convenience.

The interviews lasted for an average of one hour and were carried out in the respective offices of the personnel.

#### *Procedure for Large Scale Survey*

The survey questionnaire was distributed both electronically (in England) and in envelopes (In Pakistan). The Pakistan Police authorities agreed to deliver the questionnaires across their posts and allowed a research assistant to contact them in case it was required. The researcher's email and contact address was provided to the participants in case it was required. The research assistant, an expert in the field was hired for data administration. The purpose was to distribute and collect the questionnaires. The questionnaire feedback was also taken and mainly some of the participants were concerned about the shortage of timings and concentration to fill in the forms. The research assistant was hired with terms and conditions of the research ethics and was paid over a period of two months. The data targeted a population of above 4000 police officers in the UK, and 500 in Pakistan<sup>22</sup>. Some of the challenges faced by the researcher in Pakistan were the lack of cooperation from Police authorities due to their security concerns. In Pakistan, the research facilitation for students is not well established and this is added to the facts that recently the police have been the victims of terror attacks and more than 2000 police officers killed (as indicated earlier). They were threatened to take part in any activity where their identity or well-being was at risk. The research awareness was already lacking, therefore this challenge was met by negotiating with the police chiefs who directed the officers to contact researcher and approved the interviews/survey to be carried out and distributed by a police person within the post. One of the limitations was that the research assistant was not allowed to distribute the questionnaires. However, the questionnaire was self-explanatory and the pilot study included clarity of understanding in the responses.

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<sup>21</sup> The Sri Lankan Cricket team visited Pakistan in 2009 and were attacked by terrorists

<sup>22</sup> The difference in the access of the number of personnel is due to mode of contact. In UK, the email portal system allowed access to a large number of personnel whereas in Pakistan, the researcher had access to a limited number of police stations based in two cities.

### 5.19 Ethical Approval

The ethical approval was sought for two purposes. The first one is the enhancement of the University's reputation. The University of Huddersfield has to protect its interests and reputation as a research organisation thereby requiring all research students to seek ethical approval. The ethical approval requires:

1. Approaching Participants
2. Informed Consent
3. Confidentiality
4. Withdrawal from the study
5. Anonymity

Ethical approval was sought from the School of Human and Health Sciences, University of Huddersfield, UK (SREP<sup>23</sup> Committee). Access to potential participants within UK was obtained by seeking research agreement with the Police research department (see Appendix F). Similarly in Pakistan, the agreement was negotiated by both personal contacts and using gate keepers. It was however not possible to obtain written agreement from the Pakistan Police due to their security concerns. They, however, verbally agreed to participate and facilitate throughout the research.

#### *Ethical Issues for trauma research*

Recently, with the growth of trauma exposure research, the investigators have been trying to study the risk of asking trauma related questions on the questions about the ethical consideration (DePrince, Chu, 2007). Studies exploring the responses to filling questionnaires or interviews indicated that majority of the participants favour their participation and consider it as beneficial. Only a few report having regret and discomfort (Newman & Kaloupek, 2004).

The researcher observed that police officers in the British sample showed concern over time limitation in terms of interviewing and filling questionnaire whilst the Pakistani police officers showed concern over fear of accountability (i.e., the researcher might be a media reporter) and lack of time for interviews for questionnaires. The possible reason for lack of motivation in police officers to take part in a research oriented activity is partially because of lack of understanding about research needs, and pressure from authorities,

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<sup>23</sup> School Research Ethical Panel

negative image and fear of being held accountable for taking part in the study. The researcher sought ethical approval from relevant authorities and each interview took place with their consent and understanding.

It is the main ethical principal to consider both harm and benefits for the participants and it is equally important to communicate this to the participants prior to the study. The information sheet included relevant information and it mentioned that the participation was entirely optional.

In the present study, some ethical issues arose regarding participant access and confidentiality of the information. For example the officers in Pakistan were hesitant in filling in the questionnaires stating that the researcher could be a media reporter and they were already afraid as a result of the Sri Lanka cricket team incident.

#### *Issues about confidentiality*

Some of the police personnel showed concern over the confidentiality of the information being shared. They, however, clearly understood the benefits of doing this research and outweighed the advantages of taking part in the study. The researcher explained the regulations regarding confidentiality of the information. It was explained that all information shared would be used only for the research purpose and will not be given elsewhere.

#### *Concerns about provision of security of the researcher was denied*

In the initial interviews in Pakistan, the police authorities refused to provide personal safety for the researcher which was due to the countries violent situation. Considering the security threats and risks, the postal survey method was chosen and all the survey questionnaires were distributed within the police division by one of their representatives who accompanied the research assistant. The interviews took place within the police organisation, and this issue was resolved through negotiation.

#### *Access to participants*

One of the challenging issues has been obtaining the access to research participants, which was resolved through negotiation and personal contacts. This observation, however, is being cited to reflect on the need for research understanding among such institutions and would improve efforts to increase mental health services.

## 5.20 Data Analysis

### *Analysing Interview Transcripts*

Each interview was transcribed and coded as defined in grounded theory approach (Strauss & Corbin, 1998). Emerging themes were identified and categorized in terms of similarity of occurrence in responses. Each theme thereby identified was further categorized into sub themes depending on the relationship of the responses.

The validation of interviews took place by going back to the interviewees at stage one. Three of the participants agreed to comment back on the conceptual model. The data analysis for the first phase was mostly iterative in nature i.e., it was constant comparison.

### *Constant Iteration*

As grounded theory is generally iterative in nature (Strauss and Corbin 1960), the data analysis involves constant comparison and evolution through coding and categorisation. The coding involves gathering similar pieces of information under one code/theme. This requires minute studying and therefore called simple coding. Afterwards, each code is categorized into a category, this time being more sophisticated and complicated therefore called, selective coding.

The process of coding is described in the following diagram:

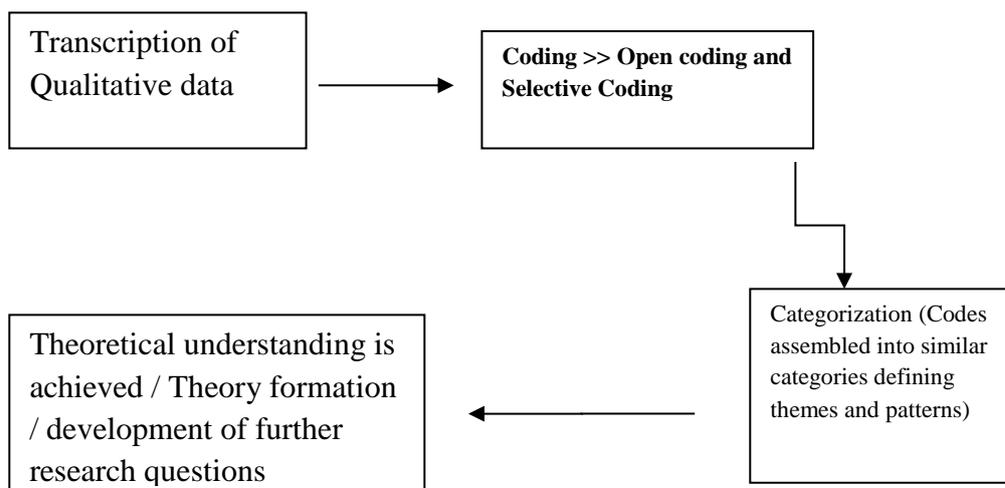


Figure 5-7: The process of coding

### *Transcription of Qualitative Interviews*

As a first step, the recorded interviews were transcribed by the researcher. Partington recommends recording all interviews and transcribing them oneself, since it ensures approximate familiarity of the researcher with the data, as well as to allow the opportunity for reflection on interviewing methods (Partington, 2002). The transcription was carried out within a month and each transcript was checked twice to ensure approximate accuracy. The transcriptions were then subject to careful coding using the GT approach.

### *Coding and Categorisation*

Manual coding was a preferred method of analysis due to possible distractibility of learning a software, and because the sample was relatively small. Coding in Grounded theory, refers to a process of integrating the data for themes, ideas and categories and then marking similar passages of text with a code label so that they can easily be retrieved at a later stage for further comparison and analysis.

Coding can be referred to as labelling as it makes it easier to categorise codes in terms of similar themes. Grounded code refers to coding the data as it emerges and putting aside the assumptions and prejudices thereby allowing data itself to reflect some patterns and themes. This is predominantly done to explore new dimensions and themes in the area under investigation within “given context” of the research.

The codes were categorized into similar themes based on similarity of patterns. Categorisation requires constant comparison to see whether there is any link or connection between categories (Strauss & Corbin, 1997). Memos were also taken to write personal reflections on thoughts and observations during the interviews.

### *Development of themes and conceptual framework*

The themes will eventually reflect the conceptual framework as generated by the process of coding. The conceptual framework is discussed with detail in the coming chapter. To summarise, the process of analysis helps to provide the conceptual framework which gives meaning and understanding of the topic under investigation.

### *Methodological Reflexivity*

While carrying out this research, constant reflexivity principles were followed (Denzin, 2009). The researcher role was expected to be neutral throughout the study although the researchers presence during the structuring of the research plan may influence findings indirectly. Maximum effort was made to ensure credibility of the research methods used, by deploying mixed methods. Mixed methods allow data integration and comparison thereby the methods were rigorous. Using mixed methodology has wide implications as discussed in earlier sections.

### *Quantitative Analysis*

The second phase of this study involved a large scale survey on Pakistani and West Yorkshire Police to assess psychological robustness and psychological wellbeing. The primary analysis included Cross Tabulation and descriptive analysis (using PSAW). Some secondary analysis was done to control factors effect of age, gender and service duration which was carried out using regression analysis and Analysis of Variance (ANOVA) test.

#### 5.21 Summary

This chapter presented an overview of the research methods and methodology. It started with explaining the use of combining two approaches, their benefits in context to the current research. This was followed by a discussion over various methods to collect data and suitability with the research aims. It was concluded that the mixed methodology provided a more in-depth view of the phenomenon which was understudied in Pakistani context. Grounded theory was an effective way of carrying out indigenous studies. The participant's selection and development of study tools was also described. This chapter concluded with indicating the statistical tests used in the results. The next three chapters describe research findings from three phases of the study. The purpose of describing it in three parts is to help understand the research conduction process and development of protocols and their validation at the same time.

## 6 PRELIMINARY INTERVIEWS

### 6.1 Introduction

This chapter presents a summary of findings from the pre study interviews in order to develop a conceptual framework and the subsequent questionnaire used in the main study. It further describes the conceptual understanding of trauma, its psychological impact and coping. An understanding of how personnel manage to cope has been gained by interviewing expert police personnel from both countries. These personnel were high ranked senior police officers (mainly police detectives) who had immense experience in detective police work. These interviews were recorded and transcribed by the researcher and later, these interview transcripts were analysed for further coding. This chapter gives personal accounts of the trauma-related experiences of senior police officers (n = 10), all of whom had been in management positions for more than 6 years (on average). The aim was to guide the researcher in narrowing down the research aims/objectives by identifying need based areas.

#### *Key Questions in the Interview Guide*

This interview guide was designed to understand various aspects of coping in the line of duty in police work. The semi structured guide was designed from the information/knowledge obtained from the literature review, personal experience and exposure and intuition. The guide had several sub-questions leading to the following main aim:

- Type of work: Is there any emotional component attached to the event?
- How is trauma perceived in a police mind? Exploring coping process
- What pre/post trauma support is available?
- What are the challenges involved in coping?
- Thematic Analysis of interview transcripts

The first questions regarding any trauma related event/incident are what happened and to see what is the probability/risk of psychological harm. In response to the question: “What is the nature of events you are exposed to?” the respondents provided full details of the nature of exposure to traumatic events involved in their routine work.

For example:

*“I joined the police force as a direct ASI24 in the investigation unit. Briefly sketching its structure, the crime itself is divided into six units. For example: Juvenile, child protection, anti-trafficking unit etc.....I have been in charge of the child protection unit for around 22 years. It is routine for us to witness the traumatic situations.”*

(Pakistani, 39 years)

Another similar response from the British police officer follows:

*“I investigate homicides or lead the investigations into homicides, kidnaps, extortions and rape etc.”*

(British, 49 years)

It follows that majority of participants that were included in the research had an experience in dealing with a wide variety of tasks or situations which were highly sensitive and had a gross affiliation to the officer involved. Expanding on the details about what kind of trauma it was, one of the respondents from the UK police force replied:

*“...I have seen things from .... Murdered babies...whose bodies must have been mutilated....through teenage girls who...were sexually assaulted and brutally murdered.”*

(British, 46 years)

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<sup>24</sup> Assistant Sub Inspector

Amongst all the police officers, the most similar descriptions were of the content and nature of the trauma.

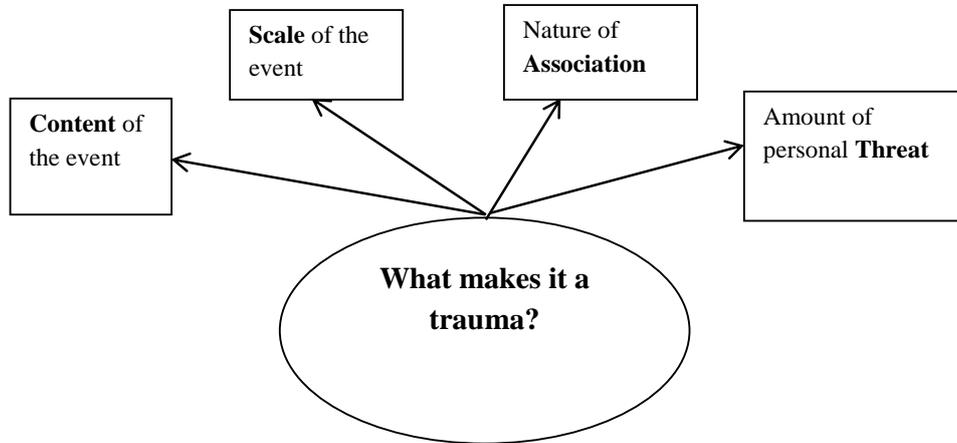


Figure 6-1: Thematic Analysis: Nature of trauma

Anecdotal responses suggest that there were four basic components of a trauma event. Firstly it depends on what was the content. A horrifying content involving scattered body parts was as equally traumatic as seeing the same incident from a distance.

The evidence from anecdotes suggested that the nature of the event/incident was one of the important features.

*“There were four murders. Very violent murders they were...I still remember! I still see those body parts scattered, brain matter all over the walls, chopped hands and feet and all similar stuff. It was a gathering of thousands of people around that place. We reached there and saw the bodies.”*

(Pakistani, 31 years)

Another Detective Superintendent from the British police, added:

*“Until I joined the police, I had never seen a dead body.....but the thing is.....when the first...I suppose ..traumatic scene...I have seen ..was as a patrol officer, not as a uniform officer...[truncated...] fatal car collision.....I remember .. ..and it was a total of I think seven dead.....and ...but it’s funny!.... (little pause)..it was just part of the job....and the people in the car.....still people....but they are dead there is nothing I can do for them!”*

(British, 46 Years)

Thus, first time exposure and later perception of the event play a vital role in traumatising. These two pieces of evidence suggest that the nature of incident can be one of the vital factors which can alter the sensitivity of an event.

In order to explore how the severity of an event might be related to the psychological impact, the following questions were included in the survey:

1. Please rate the following events in terms of frequency of occurrence.
2. How much this event had an impact on you? (A self-rating on Likert scale of severity)

See Appendix A Section Two for further details

The quotes above are just a small part of a huge list of events shared during these interviews. It is clear that the intensity of emotion involved is quite high, the nature of work they are exposed to includes investigating body parts and mutilated bodies. In some cases, the sight and smell leave their marks permanently on the minds of the personnel involved.

*“The smell of the shells and bombings is still on my mind, I can recall that horrifying terror attack which took several lives of innocent people! But that’s my duty.”*

(Pakistani, 31 years)

Therefore, it can be concluded that there is a significant emotional component involved in traumatic events, which needs to be explored further in terms of its influence on the psychological wellbeing and integrity of workers. The following item pool was generated based on these findings:

1. Please briefly describe any work related incident/event you have seen which was significantly unpleasant for you. Please mention the date when this incident happened.
2. Please describe what was unpleasant in that particular event for you.
3. What do you think you could have done better or what could be improved in

These three items incorporate not only the emotional nature of events, but also seek to examine what challenges are involved in a particular investigation.

## 6.2 Emotional Reactions to trauma exposure

Although denial (a defence mechanism) may help them in focusing on the present investigation, the majority of the officers explained having experienced transient psychological responses such as feelings of pain, distress, guilt, helplessness. Transient – probably because the officers don't dwell upon their reactions, considering them as least important. Some of the responses from British police are as follows:

*...” It was a very painful scene..”*

*....” I don't particularly feel distressed.....but I do feel.....I don't know what that word is.....sadness may be....”*

*“It does upset me sometimes, but I don't bother about it anymore”.*

A majority of the officers acknowledged having experienced emotional outbreak resulting from traumatic experiences. They however suggested that various factors including lack of time, lack of prioritizing personal feelings, time pressure, and consistent exposure, appeared to play a crucial role in de-neutralising the effect of emotional outrage. This means that probably the role of police officer countervails their need to reflect on emotions or its management.

*“We cannot think about our own emotional position. At the crime scene, the mind works quite fast, we know what our duty is, we are being paid for that, so right now, we have to collect the evidence so that we can reach culprits or terrorists”.*

(Pakistani, 45 yrs.)

### Channelisation of feelings

Following the previous question about emotions and trauma, the officers were asked to explain how they identified their own emotional responses recurring from their trauma exposure experience and how well they manage or processed these reactions. It appeared that most of the officers reluctantly agreed that they do experience pain and are affected by their day to day experiences in policing. For example, as quoted by one of the senior officers:

*“... I don't reflect on that really, I don't dwell on it... [....].. It is part of my life that ...I think I can cope with it....a...i don't find ...seeing dead bodies distressing and i don't (word missing?) it disgraceful. I think a lot of people find the sights and sounds and smells, very upsetting.....but I don't .....”*

(British, 46 yrs.)

Thus clearly, repression turns out to be one of the most frequent defence mechanisms used to dismiss the disturbing psychological impact. Self-belief and faith are other important contributors towards emotional management.

*“Faith in myself and my profession, belief in Allah almighty helps me to remain strong and alert.”*

(Pakistani, 39 yrs.)

Another element that emerged from the interviews was fear of contempt. The majority of the officers described the emotional reactions about seeing unpleasant sites, but emphasised that their personal reactions or feelings were quite separate to their on-going investigation and had little or no immediate effect. It appeared that the officers were more concerned with completing the job and finishing the assignment and considered emotions and work as two separate entities. For example:

*.... I don't particularly feel upset, yet....sadness maybe, but the thing is....you can't feel upset for yourself because if I do, I cannot do my job....*

(British, 43 yrs.)

Similar opinion prevailed among Pakistani police officers who denied the need for accommodating emotions while doing their job.

*“....there is no expression on police officer when he goes on an investigation. If he gets disturbed, and worried, how will he work?”*

(Pakistani, 35 yrs.)

Patriotism and submission to the work role were consistently acknowledged to be most important

*“We have only one thought when an investigation is going on, we are servants to the public and when the public calls out for help, we are at the forefront”*

(Pakistani, 49 yrs.)

The consistent dealing with the same situation also neutralises the impact as it is reflected in the following evidence.

*“My own emotions....amm....it does not bother me! We deal with it so much that it does not bother me. Nothing upsets me anymore. Am.....it does upset me sometimes but ...it bothers me sometimes when I deal with family however”.*

*“Well.....on humanitarian basis, as a Muslim, I feel they are my fellow men! Who have been killed in blasts, for example, in that context, I get the feeling of extreme shock ...like oh! Why has this happened! Yes the first impression is not good! But as a police officer our mind gets oriented towards further investigation which is most necessary”.*

These responses indicate that once an investigation starts, as a detective, the officers have to collect evidence in a short period of time, and the instant emotional response of sadness, pain and disgust is set aside (or not considered) since they can potentially divert concentration which is required during an investigation. The officers described a wide array of feelings while describing the incidents such as “pain”, “guilt”, “feelings of distress”, “getting upset” etc. One of the strong themes that emerged from this discussion was awareness about, and acceptance of personal reactions related to the traumatic scene investigations and simultaneous denial from having any emotion attached with the scenes. Evidence from their stories strongly suggests how gradual exposure to traumatic incidents paralyses the psychological affects for the time being, and therefore their psychological robustness increases dramatically.

#### *Repeated exposure*

One of the reasons for considering an event as potentially traumatic was its repeated occurrence. For example, a British police officer reported:

*“Obviously we deal with murders, most distressing sites, seen a lot of dead bodies, .....so we deal with a lot of stuff, emotional... to start with....and obviously we deal with a lot of unpleasant sites! you see ... bodies, you see victims (people who have not died), people who are brain injured, whose life would be changed for a long time! And dealt with road accidents, where there has been cruelty involved and it has had a massive effect on people”.*

Therefore, constant exposure results in resistance and leads to gradual “desensitization” (diminishing effects) towards the possible harm effect of trauma. This does not necessarily mean that the processing of psychological disturbances has been accurately made, as some incidents or events can be more traumatising than others.

Above mentioned evidence also suggests that at the time of investigation, little time is available for them to consider emotional components attached. The emotionality associated with the nature of events and their sentimental value was determined by level of alertness and awareness in respective officers.

#### *Attachment or Over involvement*

Another interesting theme that emerged from the interviews was “element of attachment” with the victim families or caregivers. To deal with families and children was one of the major concerns highlighted by the officers.

*“I can't do anything about them...for the best I can do is...for family. Because most families want to know who did it, why it was done. So the best thing I can do is to find out who did it, with all that i had to find out . [...] So once somebody is murdered the best thing we can do is to try to reduce the effect of that murder for families...on the communities and societies as a whole.*

Thus it seems developing a certain kind of distinction between being aware of personal feelings and not letting them overwhelm is the key to minimise potential threatening effects and to maintain vigilance. Besides this, primary attention is given to the affected (victim families and carers) who need immediate attention and counselling.

Since counselling frightened children and the elderly was a delicate and sensitive issue, the officers recommended the need for psychological sensitisation among officers themselves.

Mr A, a 41 years old Pakistani police officer, shared the following incident that was challenging for him:

*“... I remember I had to interview a child (7-12 years) he was looking extremely pale and terrified. It is also part of the training which I learnt from experience. How to counsel and speak to a terrified child who has witnessed the crime, to collect information in a sensitive way. We have been sensitized about such issues, we collaborate with local NGOs and such child issues are dealt with, and I have learnt a lot through my experience, how to deal with trauma and trauma survivors”*

(Pakistani 41 yrs.)

This evidence strongly suggests that while dealing with the investigation, the officers are quite likely to get attached to the victim's family long after the incident. They try to compensate for their loss due to the feelings of guilt. Feeling sorry for the incident, some of the officers described personally approaching the families to solve their case related

problems (and some even reached out to help the poor families in their capacity). This appears to be a strong link towards coping (which can be further explored in the study).

#### *Guilt vs. Compensation*

Guilt was categorized as a separate theme due to a significant impact of cases not being solved properly (due to either delay in justice or external pressures). Some of the officers pointed out the flaws in implementation of laws to the extent that they had to personally assist the victim or their families as compensation to their delays. As reflected in the following statement of one of the Pakistani officers:

*“...at times I felt guilty of not being able to help.....women helpless with their problems. For example, in one case we were told to remove a street hawker....his wife came to us to beg for mercy....we could not, because this is the law. They had to suffer, as their life depended on this business, which we destroyed. I cannot do anything, I just sent my wife to their house, gave some money and kept helping them personally so that they are able to survive. These types of work issues are cause of much sadness....”*

(Pakistani, 45 yrs.)

Terrorism and related issues have raised multiple disaster management concerns all over the country (Pakistan) and policing cannot be excluded from their involvement in terror investigations (along with their routine). Some of the officers reported the dealing of public cases being affected by their over indulgence in terror related investigations. This was an important element in the present study as not being able to protect the public or providing instant justice was one of the factors contributing to stress and frustration in these police officers.

#### *Appraisal of trauma experience*

Studying how trauma is seen or perceived might help to understand what mechanisms are involved in adjusting to the situations to which these officers are exposed. The pre-study investigation suggested an association between the “symbolism of trauma in an event” and “trauma behaviour”. Several symbolic factors such as the nature of personal association, an element of guilt, the police job, the question of loyalty and morality, and a fear of contempt were identified. These factors will be briefly discussed linking them with emotional channelisation.

### 6.3 Symbolisation of “trauma” in an event

In the following section, “trauma symbolisation” refers to the way a trauma incident is perceived. It means that a large proportion of being traumatised is the way the event is seen or projected, as is mentioned by one of the officers:

*“Many years ago I was one of the investigators on the fire at the Gilford Stadium in....supposedly in 1980 I think.... and that was a traumatic event really that 50 or more people were killed in a fire and I was the only exhibited officer on that ..so....memorable. ... but when you class it as critical or anything else is how you built in it yourself isn't it.”*

(British, 39 Years)

As it can be seen from the response above, the trauma has been symbolised as a production within self, a construct within the person involved. This type of symbolisation using logic could be a way to temporarily escape from trauma effects.

#### *Rationalising or Justifying attitude*

A method of rationalising is justifying the emotional sensitivity by considering any form of association or attachment. For example:

*“One of the events I remember is about a suicidal attack on a mosque. Now when a mosque is attacked it is a different attack. A mosque is home of Allah, and I saw more than 20 dead bodies lying here and there. Seeing such things make me cry naturally out of emotions.”*

(Pakistani 31 years)

*“Similarly I was there when there was an attack on Musharraf<sup>25</sup>. I believe we are Muslims and a mosque is very respectful for all of us. It causes much stress.”*

(Pakistani, 39 years)

Here, the context of religious places gives the event an added emotional sensitivity and attachment for the officers.

*“Well....on humanitarian basis, as a Muslim, I feel they are my fellow men! Who have been killed in blasts, for example, in that context, I get the feeling of extreme shock ...like oh! Why has this happened! Yes the first impression is not good! But as a police officer our mind gets oriented towards further investigation which is most necessary.”*

(Pakistani, 42 years)

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<sup>25</sup> Ex President of Pakistan

Therefore, religious elements, humanitarianism etc. might reflect emotional sensitivity of the event. In contrast to this, showing a sense of detachment and emotional numbness is also a form of rationalising emotions:

*“I have gained a sort of detachment from what I see, because when I go to murder teams, I have seen things from .... Murdered babies...whose bodies must have been mutilated....through to teenage girls who...were sexually assaulted and brutally murdered.....and yes it does have an effect...it has to do because you cannot forget...things like that won't you?”*

(British, 46 Years)

This evidence reflects that the association with a traumatic event can potentially make it significant or create detachment. In either case, the police officers' mind is job-oriented and focused on the policing role. In other words, there is no “I” or “Me” in police work. The next section details this aspect.

*“Me and Job” cannot coexist!*

Importantly, the rationalisation of the event was also depicted in the form of work prioritization. In other words, either “me”, or the “Job”.

*“I am going back to 1985 I think....when there was a big fire....and after that...people died in that and after that...there were some police officers who were there.....who were wanting to sue for compensation...because of what they have been through. You know, for me....they should not be in the police service...you join the police service, accepting that the chances are that you will see some pretty horrible sites, whether that be dead people, whether it be seriously injured people, whatever it might be, and if you cannot accept that and deal with it, you should not be in the police service... “DON'T JOIN”*

(British, 46 Years)

Also as another added

*“Whichever national force it is, let it be: provincial, uniformed, (army, navy, air force, police or para-military), all these uniformed jobs, when they have joined a profession, they have made a commitment, and signed an agreement with them that we are going to die and live for this particular organization. In such cases, the duty hours carry no meaning (if we compare it with the motivation and drive to join the force). Will you believe that sometimes I cannot even sleep for two hours at night. I get a call for an investigation and I have to go. It is an agreement I have made, so I have to comply with it.”*

(Pakistani 52 years)

Few Pakistani police officers responded as follows:

*“When we join the police force, we know that we are a servant of the public for 24 hours, whenever the public requires a cop, we are readily available to help and protect, no matter if we are tired, or whatever.”*

(Pakistani 31 years)

*“There is no expression on a police officer when he goes on an investigation. If he gets disturbed, and worried, how will he work?”*

(Pakistani 31 years)

*“I think it’s our understanding that we have to take it as a duty and not personally. It is quite natural to be upset and over whelmed by the whole incident.”*

(Pakistani, 39 years)

Of course, paying attention to one’s own needs gets compounded with other priorities such as the job itself. Although acknowledging trauma might help, the moral obligations and job loyalty probably orients these officers towards ignoring their temporary feelings in order to remain focused on their work. Rationalisation therefore can be seen as a workable coping strategy, though its effectiveness is arguable.

#### *Trauma Effect: A matter of past*

According to a few police officers, emotions become less intense with the passage of time.

*“We have seen several dead bodies, even living people with torn parts. But since we take our job as our duty, it is no more difficult to overcome the stress coming out of it. However it’s true for a time when I had just joined the police force, when I used to go to investigations, I used to get worried because those were horrifying images. Now I don’t.”*

(British, 39 years)

*“I still remember that incident. It stays with me over a number of days. But then we have yet another case and it becomes part of the past.”*

(Pakistani, 43 years)

The evidence indicates that constant cases and investigations do not provide time for trauma to either process or exhibit and these emotions go unnoticed. This could be possible because sometimes, the psychological reactions are temporary and may reappear in some other time.

*The rare acceptance! “Yes I do get emotional! but...”*

Although denial (a defence mechanism) may help officers to focus on the present investigation, the majority of the officers explained having experienced transient psychological responses, such as feelings of pain, distress, guilt, helplessness. These feelings are transient probably because the officers don't dwell upon their reactions, considering them as least important compared to doing their job:

... *“It was a very painful scene...”*

(British, 49 yrs.)

.... *“I don't particularly feel distressed.....but I do feel.....I don't know what that word is.....sadness may be....”*

(British, 52 yrs.)

*“It does upset me sometimes, but I don't bother about it anymore.”*

(British, 38 years)

It was interesting to note that although most of the officers reckoned that emotions cannot be avoided from a trauma scene, various factors such as lack of time to reflect, lack of prioritising personal feelings, time pressure, and consistent exposure, appeared to play a crucial role in neutralising (or as it will be elaborated later: channelisation) of these emotions and therefore: gradual desensitisation effect. This probably means that the role of a police officer countervails their need to reflect on emotions or their management.

*“We cannot think about our own emotional position. At the crime scene, the mind works quite fast, we know that what our duty is, we are being paid for that, so right now, we have to collect the evidence so that we can reach culprits or terrorists”.*

(Pakistani 45 years)

There were interesting cross-country exhibitions of emotional channelisation; while most of the Pakistani police officers considered morality, religiosity, fear from God, or faith in God as the most important helpers, the British police officers gathered their strength from their own set of beliefs about life and death, prioritisation of work, and being in the job.

A British Police official responded:

*“You know, if seeing what you see and dealing with what you deal with is too much for you. Get out!”*

(British, 46 years)

Interestingly, this response reflects a strong understanding of the police role and the importance of being committed to the job. A Sense of responsibility and commitment was also reflected from the responses.

*“This job has given me more than I was wanting ever. I am from a very bottom person. I joined as a constable and maybe you won’t believe, there is no element of sifarish<sup>26</sup> in my promotions. It’s all on merit and Alhamdullillah,<sup>27</sup> I am now an inspector. Generally speaking, if we don’t keep the loyalty with our profession, then we can never attain anything. We know there are many ups and downs in the profession, but we have to owe everything!” (you need to make the 15 and 16 smaller.”*

(Pakistani, 51 yrs.)

Bottom person refers to an ordinary man who is humble and down to the earth. These evidences reflect acceptance of profession and acknowledging the outcomes as a “cost to pay for betterment. For example on one side the duties have to be fulfilled because otherwise loyalty will be compromised. However the officer must accept this reality in order to move on.

#### 6.4 Motivating factors

For the majority of Pakistani officers, it was faith in God which was most helpful in dealing with difficult situations.

*“As I have said.....Allah mercy and grace always helps, morality and moral values also are important. Honesty with the profession, fear from Allah.....provision of justice, and if Allah remains with you, you are always never afraid of any violence. These are some of the things which help and make a good police officer”*

(Pakistani 42 years)

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<sup>26</sup> Translation: Favours

<sup>27</sup> Translation: By the grace of Allah

*“I only think that I am very patriotic, Muslim and part of the society. I have been posted several times on mosques and for me...it is sacred to be at that position. It is a complete satisfaction for me thinking that people sleep in peace due to us, people celebrate Eid (religious festival) when we are on duty, and for me...the SAWAAB (blessings) is most important”*

(Pakistani 39 years)

These quotes suggest that performing duties can be seen as attributable to a noble task and therefore a feeling of joy and pride assists in overcoming grief and pain from day to day trauma experiences.

In order to explore whether emotional channelisation (whether by avoidance, denial or acceptance) helps in combating stress and gaining resiliency, the following items were included in the survey questionnaire:

*When an investigation is over, it is gone. I never think about it.*

*I try not to think about any incident which is painful.*

#### 6.5 Coping with traumatic experiences

Initially the researcher was interested in exploring the psychological assessment procedures required to hire police personnel and how they help to identify and improve resilient officers. The response from the British police officers was unhelpful in this respect as most of the British police officers opposed the idea that any sort of training/testing equipment could be beneficial or helpful. In contrast, in Pakistan, there was an obvious lack of support, the officers appeared to praise the influence of training and deemed it as highly helpful for them. These kinds of findings made it clear that some questions related with importance and perception of training and support should be included in the questionnaire.

Some of the British police officers viewed the psychometric testing as unhelpful.

*“I don’t think that training can help. I completely believe that no psychological test can help identify psychological issues or mend them. It is police work and one learns through experience but hardly through training or assessment.”*

(British 43years)

Pakistani officers appeared to praise the benefits of training, which was deemed especially crucial for fresh recruits.

*“First thing is that the motivation of the new recruits is dependent on the organization itself. Through proper training, grooming and support”*

(Pakistani 31 years)

There were mixed responses as to whether training can be beneficial. In order to explore this aspect, the following items were included in the main survey:

4. At some point in your service so far, have you ever felt the need to speak to some expert about your psychological health?
  - a. Yes
  - b. No
5. Who would you seek help from if you had a psychological problem?
  - a. A Psychologist
  - b. A Psychiatrist
  - c. A Medical Doctor
  - d. Discuss with family
  - e. Discuss with friends
  - f. Discuss with my manager
  - g. I can manage myself

Other (please specify): See section 5 Appendix for details

The universal response to the question “What helped you personally to deal with unpleasant feelings” was that personal attributes, such as emotional intelligence, ability to prioritise tasks, resiliency, emotional strength and several other personal factors were said to be influential and helpful. Resiliency, motivation and a strong sense of responsibility were identified as the most important factors for coping with traumatic situations in this profession.

*“...the sense of responsibility should be in the grasp of a police officer!!! Without it, there is nothing! ...we are a servant of the public, and it is our responsibility.”*

(Pakistani 53 yrs.)

The belief that corpses under investigations have no significant emotional value helped the officers in not getting personally attached to, or influenced by, the incident. Similarly, for most of the Pakistani officers, their moral values and faith helped them in dealing with the situation. Faith, combined with personal values such as dedication and commitment, loyalty and honesty and a strong belief in power of the Almighty, played a role in helping them in being vigilant on duty. The majority of the officers believed that their family support played an essential role in coming out of upsetting phases. It was reported that if the officer shares the upsetting incident with their families, it helps them to maintain a

healthy balance. Similarly, all of the officers reported supervisor / senior support and understanding to play a buffer effect in this case. During the interviews, public and police relationships were considered to add confidence and trust in police personnel. Being debriefed and thorough pre-planning of a situation also helps to deal effectively with any possible trauma.

Besides these personal attributes, the police training and repeated exposure was other factors which were helpful in maintaining psychological wellness (as discussed above).

The following items were included in the survey questionnaire which reflected coping strategies:

12. I enjoy meeting with my friends
13. My friends are helpful when I am experiencing some problem
14. I have a loving and caring family
15. It helps me a lot if I can discuss the issues I am having with someone
16. I use humor to help me cope
17. My faith gives me support and strength

See details in section 4, Item 12

Amongst different coping strategies, support networks played a key role in the life of a police officer. The following hierarchy was suggested by the officers in terms of their significance:

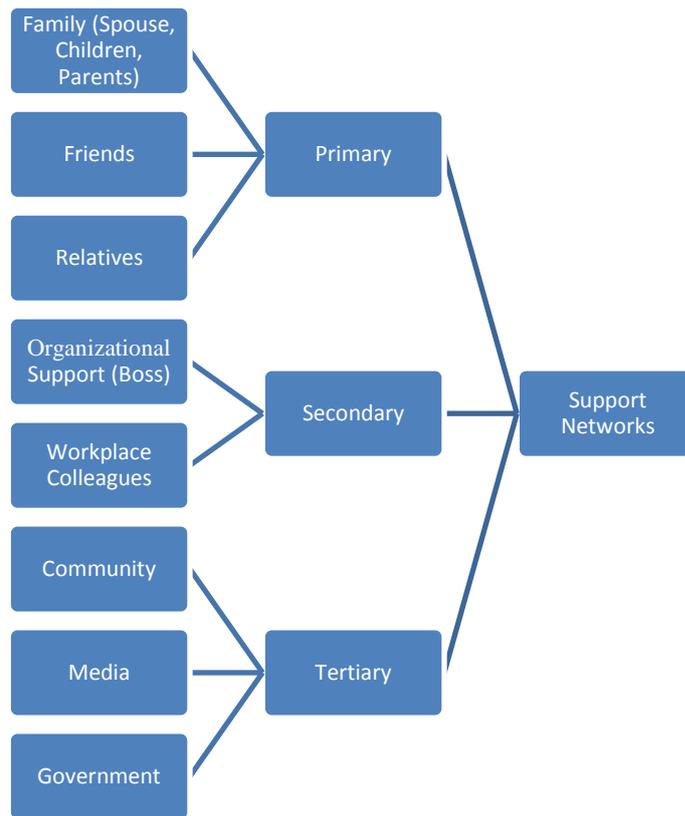


Figure 6-2: Support Network related themes

The diagram sketches responses obtained from questions about support networks which were helpful in dealing with the after-effects of trauma. As is quite apparent in the figure, the three levels (Primary, Secondary and Tertiary) have significance in the life of an officer. The primary support network is immediately available to the officer and family support can buffer the impact of trauma on the lives of officers. Support from the workplace plays a key role in developing motivation and increasing work efficiency, similarly the tertiary support network such as media projection, governmental interest has a significant role in determining officer`s self-acceptance, identity formation and ultimately the trauma response and behaviour.

The following items were included in the survey based on support networks:

1. On-going training has helped me to understand my psychological needs
2. I can discuss my concerns with my manager
3. I can share my concerns to my colleagues
4. I have a loving and caring family

## 6.6 Challenges towards coping

The circumstance under which an event happens shapes the way in which trauma is perceived, and the resulting psychological reaction. The response to the question about traumatic situations was a shared opinion once again. Three major factors identified were:

### *The time factor*

In most of the cases, the investigation has to be dealt with under high priority; sometimes it becomes highlighted in the media and gets the attention of politicians. The time required in completing the investigation, and careful detection, probably adds to increased stress and eventually this factor becomes a potential contributor towards turning an event into trauma. For example as one of the respondents said:

*“..due to the insufficient time, I feel that the proper investigation cannot be justified...it leaves us with feeling guilty of not being able to carry out proper investigation just due to limited time”*

(Pakistani, 39 years)

### *The families: Most challenging part*

Dealing with grieving families was declared as the most difficult and challenging task for the police officers, and often caused great personal distress. Most of the time, the officers in charge, acted as counsellors and have the duty of reporting to the family that their loved ones have died. This is highly emotional and upsetting not only for the victims' families, but for the personnel involved as well.

*“It is most challenging for us to deal with the victim's families who are grieved and it's their reaction, which is upsetting!”*

(England, 42 years)

### *Protecting the V.I.Ps*

Another interesting element emerging from interviews with Pakistani officials was serving to protect the VIPs, the high profile politicians. Serving at such a level was considered as a prestigious achievement, but it also an additional stress for the officer as he/she must be extra careful.

“During my service, I have been deployed with several V.I.Ps, and I am quite happy that I served them well and protected well. I was awarded with several prizes. I am willing to die for the safety of the persons I am held protected for.”

(Pakistan, 36 years)

It is quite likely that additional duty, such as protecting VIPs or allocation for duties carrying additional risks, is stressful, in any country’s police force. Therefore, this suggests need for further exploration.

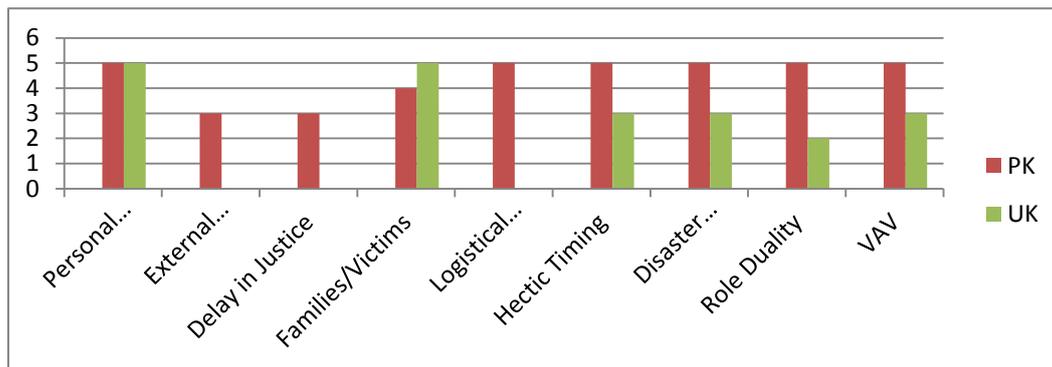


Figure 6-3: Challenges in coping from trauma

Figure 6-3 summarizes some of the challenges which need to be addressed while coping with trauma. These challenges include personal issues (family life), external issues (such as support system), delay in justice (as it produces lack of confidence in serving as a police officer), dealing with the victim families, logistical shortage, time schedule, poor disaster management, ambiguous duties and roles, and lastly, violence against controlling violence. As a clear majority of the British police officers felt that their personal matters, dealing with families and use of force is a big challenge. For Pakistani police officers, the personal Issues, lack of logistical support, external pressures (such as politicians and higher authorities), time issues, preparedness and confusion in duties was seen a big challenge towards coping. Summarising Pre Study Interviews

As part of getting familiarised with both the context and the content of the study variables, the first step undertaken was to ask experts to share any event that was particularly traumatic, intending to identify trauma related components in an event, and how they might (or might not) an effect the person experiencing them.

Quite interestingly, several pre, post, and within event factors appeared to interact with and define whether trauma symptoms would be exhibited or not (fig 6-4). For example, in the figure below, several pre-trauma factors such as prior exposure, provision of logistics and briefings somehow influence the within-event activity of the officer on scene.

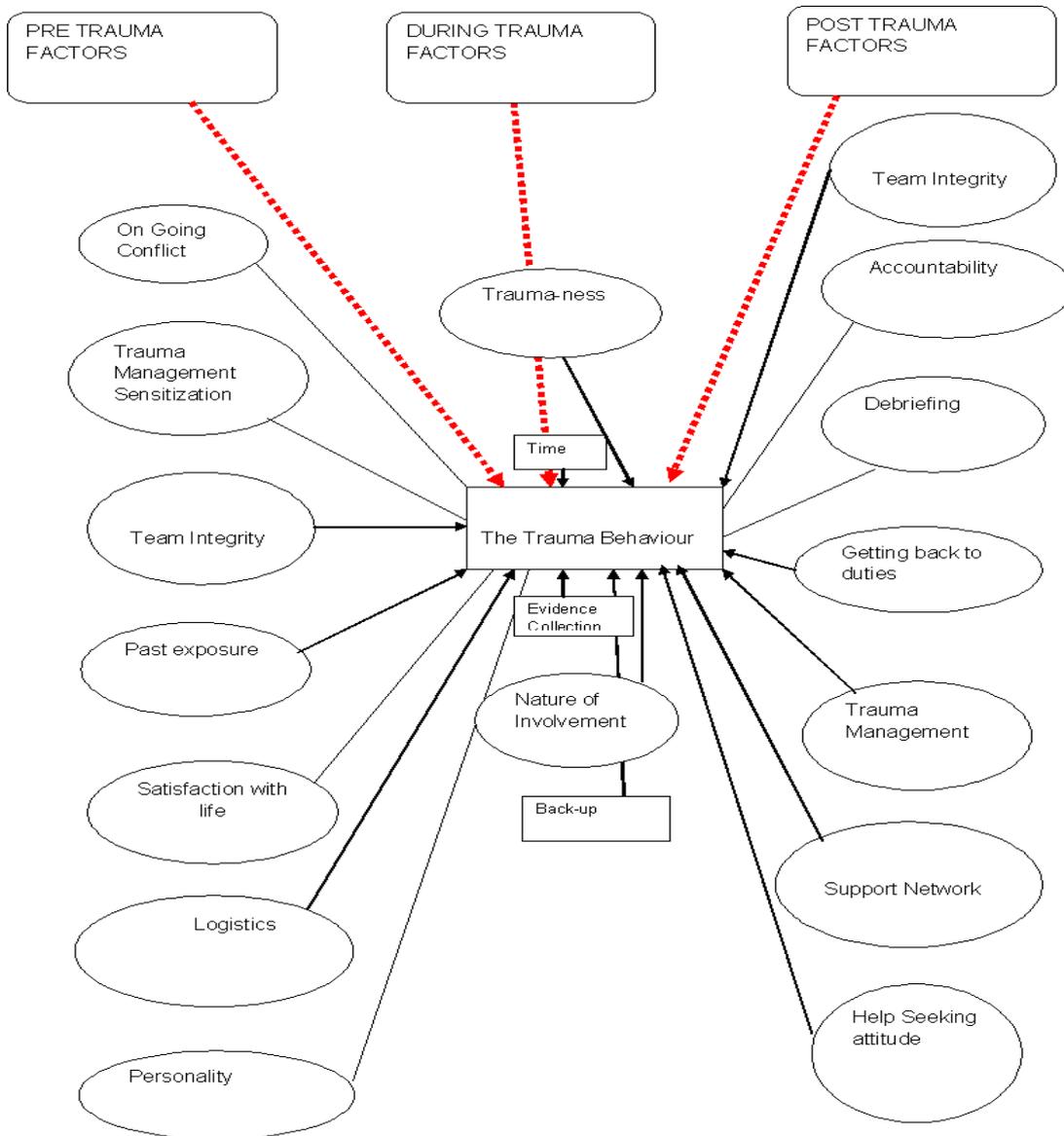


Figure 6-4: Determinants of Trauma Behaviour: Pre-Study Model 1

As shown in the diagram, the pre-, post-, and within-event factors interact to influence a particular trauma response or behaviour. As revealed in interviews, the pre-event factors or conditions which might contribute towards altering a trauma response can possibly be on-going personal conflict, sensitisation about possible potential harm, cohesion within work team, prior exposure and experience, satisfaction with life, logistical support and certain

personality attributes such as resilience. These pre-event factors can be broken down into two broad components namely: personal and professional.

Under uncertain circumstances, an officer is expected to act vigilantly at the crime scene and record the information as required. The response or behaviour at the scene however, might give a reflection of their understanding about pre- trauma factors (see figure above). The organization as a whole and individuals involved, need to work on preparedness for confronting situations as tactfully as it is required. While organisational goals are important, the wellbeing of officers as human beings should be equally considered. The nature of work can be full of strain, but if the officer is willing and prepared, dealing with strain is not a big problem.

When an event takes place, there is a particular organisational code of conduct while on duty. For example, during a crime scene, the officers have to investigate and secure all information, including taking photographs, collecting evidences (which might include touching and smelling). According to the experts, this sort of close contact with unpleasant content often has long lasting flashbacks. Many times police officers report flashbacks of the crime scene itself and the smell. This of course, cannot be avoided as it is part of the duty they have sworn into. Factors which might help to decrease the likelihood of getting intense trauma reaction could be, by being sensitized about the possibility of such a response, if new to the profession, then being supervised and the availability of counselling support. Altogether, the expert opinion interviews reflected that the personal and organisational factors (see figure 6:4) play a vital role in affecting the response in such a way that it can help either in achieving control and focus while on duty or it can make the situation worse by giving rise to a psychological crisis.

As with any emergency work, the crisis situation in police work has the potential of producing risk towards psychological harm. The channelisation or processing of any crisis is determined not only by pre-incident factors, such as those mentioned in figure 6:4, but is also dependent on what type of back-up support is available to rely on. Such as: team integrity following the incident, post incident debriefing and specially taking personnel involved into confidence, determining /maintaining a trust relationship, trauma management, availability of psychological support as per the will of the person concerned, and whether or not, the need for psychological support is felt or understood.

A combination of these factors interacts with the incident itself and resultantly, the officer involved will be resilient, mentally prepared, or otherwise.

The bottom line of trauma support programs should be to enable personnel to take care of their personal wellbeing. Most of the programs have a hidden agenda for increasing efficient police considering a decline in the number of police personnel in coming years. The welfare authorities are being suggested to devise Organisational friendly worker support programs, which focus on making police officers efficient and to avoid prolong sickness. According to the majority of police officers in the present study, there is disparity in understanding of police authorities' welfare and the welfare of police officers.

The within-event behaviour reflects whether emotional preparation has been achieved and whether the officer is resilient against sustaining psychological injuries. The third list of factors "post event factors" determine whether the struggle against sustaining psychological injuries and maintaining psychological strengths are effective or not. This pre-study model suggests a need for further understanding of a) whether there is any emotional component attached to the event itself. b) how is trauma perceived by and in a police mind and c) how the officers deal with psychological outcomes (if any) in the end: are there any challenges? The next section builds upon these questions.

#### 6.7 The researcher's reflections: Memos of themes based on observations

During the interviews, the researcher noticed some emotional reactions and feelings which were not directly conveyed, but their speech had an emotional inflection. These included:

##### *Getting attached/personal*

A few Pakistani officers mentioned being involved in charity work and working on the cases of poor women. They personally reached out to help the families who were affected by crime yet the police were helpless to support. The only way possible was to give personal support. It is important to Pakistanis to give respect to women in particular, therefore their cases are considered as priority.

During an interview, a female entered the office to follow-up on a complaint about her missing 21-year-old son (thought to be taken by the Taliban). Her case was extremely sensitive and the particular police officer mentioned helping her beyond the call of duty

despite orders not allowing him to do that. He showed sympathy for the woman, and tried to assist her as much as possible.

The idea that the officers get involved or attached to the cases they have been working on and the completion of those cases can be seen as an act of adjustment.

#### *Overtime*

During the interviews, in both Pakistan and the UK, the researcher observed that very limited time was available to these officers. Even during the interviews, the officers had to receive several task-related calls, and in a few cases the interview had to be postponed because of an urgent case. The lack of time was an important factor throughout the interviews. The researcher felt that time appeared to be an important barrier in emotional channelization, and also it could be one of the ways in which they keep going. This element has been argued in detail in the following chapters.

#### *Guilt and concept of compensation*

The researcher observed that the officers occasionally felt guilty because they were not able to morally justify their duties. This concern was high among Pakistani police personnel who reported being excessively involved in terror-related duties. It was reported that due to threats, a large number of police are deputed to sensitive places to safeguard either buildings or VIPs, yet the common man gets ignored. This took the form of personal guilt.

#### *Frustration and anger*

A lack of logistical support, accountability and several other elements caused anger and hostility among personnel. It appeared that they were frustrated and angry for not being able to execute justice properly and freely. The aggression was mainly targeted at the poor governance and lack of reforms.

#### *An act of propitiate*

During the interviews, the researcher felt that most of the Pakistani (in comparison to the UK) officers tended to impress their bosses by working extra hours. This could be a mere observation, and is explored in the main study findings.

## 6.8 Summary of Questionnaire Development

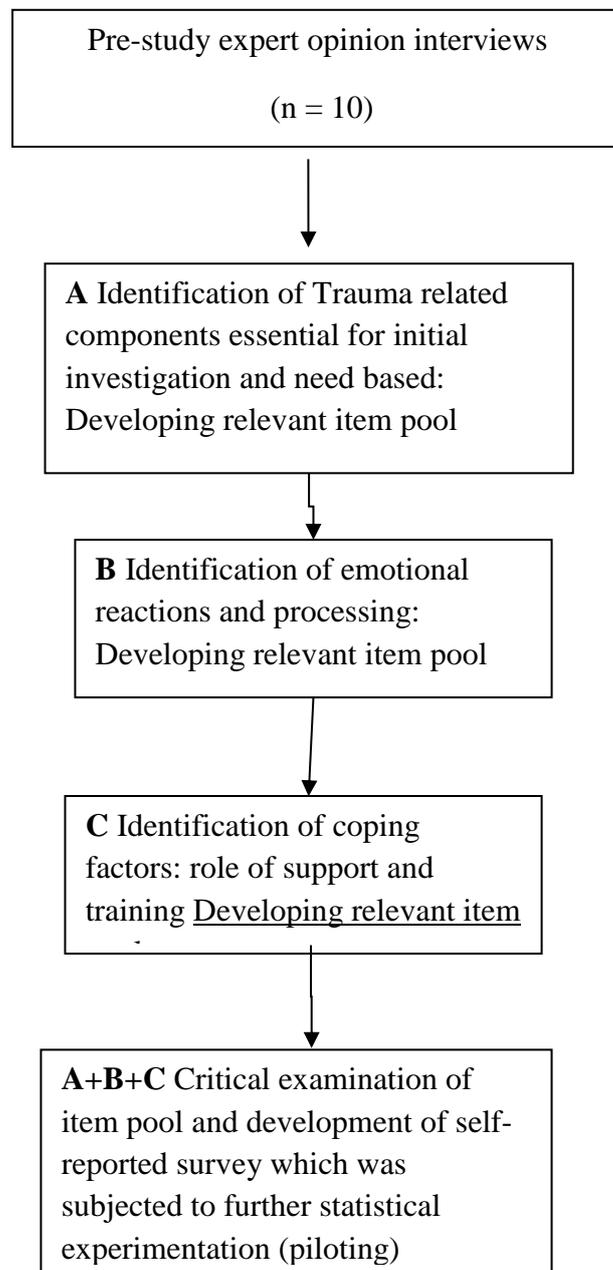


Figure 6-5: Pre to Pilot study progression

## 7 QUANTITATIVE ANALYSIS: MAIN SCALE SURVEY

### 7.1 Introduction

This chapter describes the statistical analysis of findings obtained from cross national survey. The questionnaire drafted from the coding and thematic analysis of interviews (see chapter 6) was surveyed in Pakistani and British Police. More than 800 police officers from the two countries responded to the survey, however after elimination of incomplete questionnaires, the 600 questionnaire forms were used in the analysis. This chapter presents the comparison of scores on trauma exposure and impact on variety of scales such as emotional reactions, coping and psychological support amongst police officers from the two countries.

The officer's first hand experiences of their trauma related encounters provided a fundamental rite of passage to their work life. It was quite an enlightening experience to read the personal stories about trauma and how each person was affected or influenced by that particular incident. The combination of description along with strict Likert type scales allowed obtaining a holistic view of trauma incidents or experiences which were more likely to require emotional discharge than any other. The anecdotal accounts of their traumatic experiences, the psychological impact on individual and organizations as a whole, and challenges towards adaptation revealed a broad range of themes revealing how these personnel coped and survived their individual psychological battle. Their stories are a reflection of a personal journey towards transformation into a resilient individual. These findings are based on the anecdotal evidences obtained from the subjective part of the survey questionnaire (see chapter eight for qualitative analysis). These results have been described under two broad headings i.e., the qualitative description (and analysis) and the qualitative findings (associations and comparisons). The qualitative part follows the quantitative to make a link between the way data was collected and analysed in terms of the research questions.

The main aim of this research was to examine how police officers deal with psychological outcomes of their daily stressful work related experiences.

The mixed methodology approach was extremely beneficial to obtain a holistic view of a police trauma experience and in this way providing rich information supplementing each

other. As indicated before, the survey method was used to obtain an estimate of the response rate on the frequency and nature of traumatic experiences among these police personnel.

To iterate, main aim of the study was to understand how police officers deal with the psychological outcomes of the police work. Research objectives of the present study were to a) understand meaning of trauma, emotional reactions and coping b) understand type of traumatic events/experiences, and c) to find out predictors to effective coping and resilience in the two countries.

To achieve these objectives, following research questions were formulated:

1. What are the types of traumatic experiences in police work?
2. What is the psychological impact of dealing with traumatic situations in police work?
3. How do police officers cope from the psychological impact of traumatic experiences?

In the previous chapter, the pre-study analysis of the themes leading to the formation or synthesis of a questionnaire, were detailed. This chapter narrates the actual findings from the study's main survey administered in the two countries police force. Figure 7.1 briefs the structuring of the result chapters to enhance clarity.

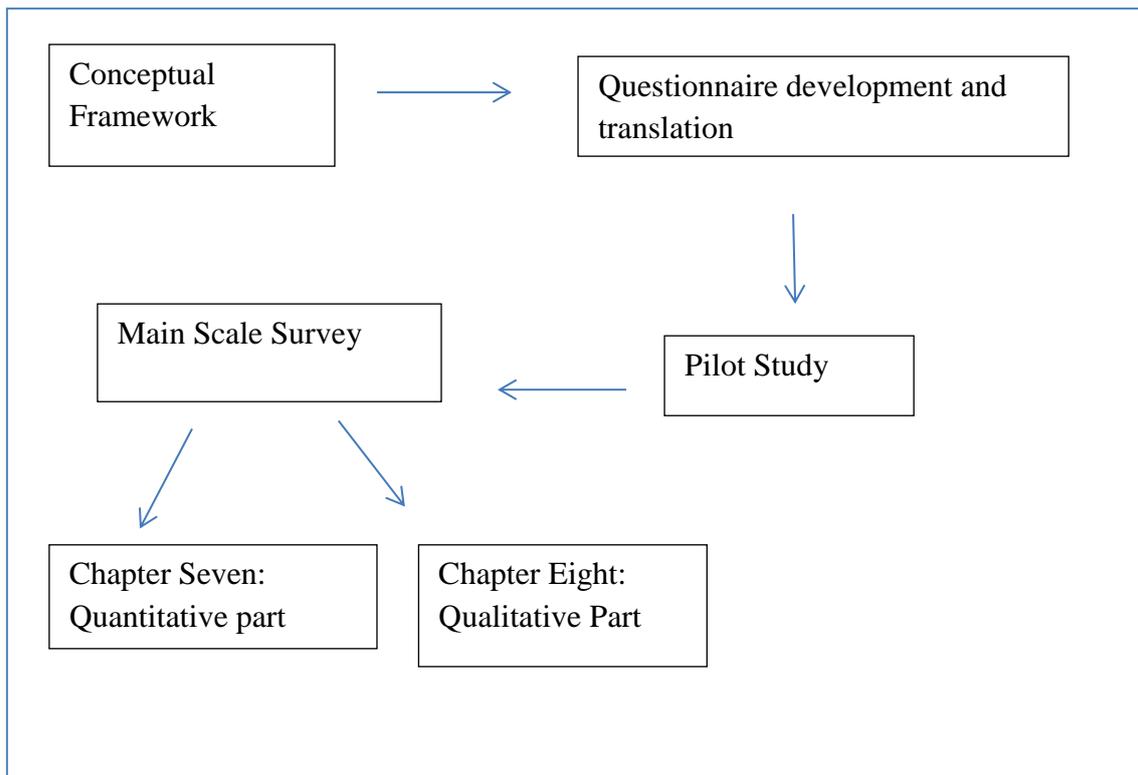


Figure 7-1: Structure of finding chapters

The research was carried out at different stages/phases as per the requirements of carrying out a study in indigenous and comparative modalities. In addition, the synthesis and development of an interview guide and survey items required standardization and piloting. These stages are described the sequence they were conducted in the current study. The first section of the chapter provides details of the findings and analysis research questions requiring statistical analysis such as Regression and ANOVA. These findings are summarized and linked with the narrative accounts of police personnel stories about their encounters and their perception about trauma and the transformation. It is anticipated that the chapters will provide rich information about the influence of trauma encounters in the psychological transformation of a police person as an individual. The later discussion reflects on how findings can contribute at both personal and organisational level for maximum benefit.

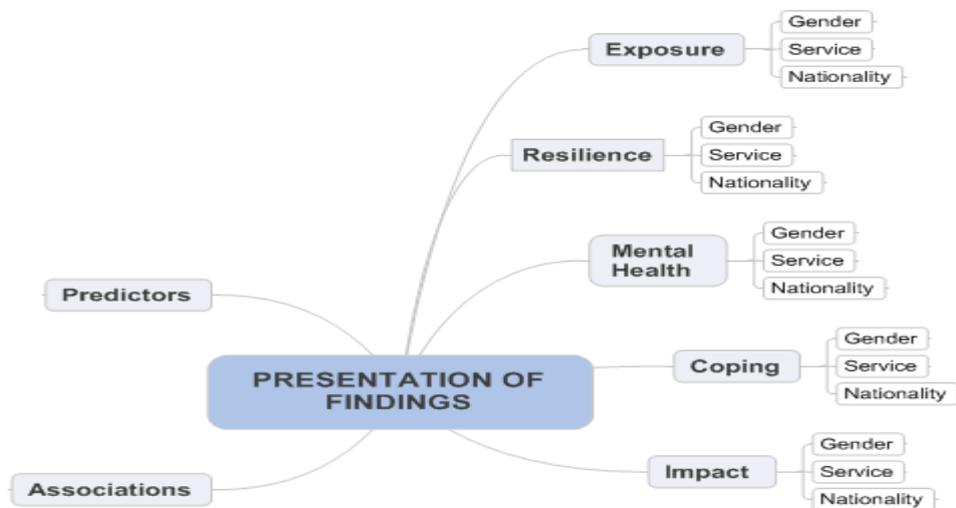


Figure 7-2: Order and Structure of Results

## 7.2 Structure of chapter

The results of the survey are presented in this chapter under the following headings:

### *Descriptive Statistics of participant characteristics*

1. Chi Square analysis on the frequency and severity of the psychological impact of traumatic events in police work
2. Nationality based variation on the frequency and severity of the psychological impact of traumatic events in police work – Descriptive and Chi Square Ratio
3. One/ Two-way analysis of variance (ANOVA) on nationality based differences on: Resiliency, Mental Health and Coping approaches
4. Multiple /Hierarchical Regression analysis on nationality based differences on: Resiliency, Mental Health and Coping ways

## 7.3 Justification of statistics used in the quantitative analysis

Depending upon the nature of research questions, a variety of analysis was carried out to understand the effect of trauma related variables on coping and resilience. The following section describes nature of statistics used and their justification to the research questions:

### *1. Analysing qualitative interviews*

In order to understand the level of trauma exposure level and its intensity (impact) of traumatic experiences, a mixture of qualitative and quantitative analysis was involved. Graphical presentation about distribution of these experiences across the nation was also described. The trauma incidents were categorised into: a) most frequent, b) less frequent and c) rare/none categories.

### *2. Chi Square Test: cross tabulation*

The Chi Square test was used to perform cross tabulation to produce descriptive for categorical variables such as service duration (categories), trauma impact (more/less), exposure (more/less), resilience (more/less) and mental health (better/poor). The cross tabulation was carried out for categorical variables (such as gender, nationality, trauma correlates and resilience).

In order to examine the nature of emotional reactions to traumatic events and to study, how they were related to the trauma exposure, its impact and other covariates (such as gender, age, service duration and nationality, qualitative analysis was suggested at the initial stage, as most of the relevant questions (in the survey) were open-ended. The emotional reactions were later considered as psychological, behavioural and biological (See table 8-1) categories. After categorisation, quantitative analysis was supplemented to understand factors influencing an emotional reaction.

### *3. Multiple regression analysis*

In order to examine predictors for resilience, the multiple regression analysis was used which controls certain confounding variables (such as effect of age or injuries) to examine whether the rest of the variables predict a score on resilience or not.

How do the police officers channel the psychological impact of trauma exposure impacts (impact scale and GHQ)? How the channelization influences resiliency and coping?

Channelisation is a broad term. Several items in the questionnaire address this question. For example: by using support network, or effectively controlling emotion scale. The cross cultural (nationality wise) comparison was run to explore this research question.

### *4. Multivariate Analysis of Variance (M)ANOVA*

This statistic was carried out in order to see the main effect of multiple dependent variables and to see the extent of interaction between them. Another objective was to estimate predictability towards resiliency and health

One of the questions was: What are the challenges faced by these personnel in terms of coping with psychological impact of trauma exposure? There are subjective answers to this question, so coding and thematic analysis was carried out.

#### 7.4 What makes it traumatic?

First research questions referred to exploring the dimensionality of trauma i.e. What is perceived as traumatic and why? This was achieved by asking respondents to narrate any experience of significant emotional value (preferably in the last six months). A huge number of respondents (above 600) shared their traumatic experiences and stories while elaborating on why they were perceived as traumatic. Some of the questionnaires were incomplete and thus, were excluded from the main analysis. The response rate was more than 50% from each sample frame. Following tables provide demographic distribution across main study variables indicating the frequency of most commonly reported trauma events. The description about types and meaning of trauma in police culture of both countries is discussed in detail in the next chapter.

## 7.5 General Characteristics of participants

The descriptive analysis generates a frequency and percentage wise distribution. The analysis was carried out for age, service duration, status of physical injuries, Mental Health training, debriefing and psychological consultation. The following table details the statistics in cross national and gender wise distribution.

### Overall Participant's Characteristics

Table 7-1: Demographic Details of participants (n = 613)

Participant Characteristics		Pakistani		U. K.	
		<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>
Average Age (years)		<i>M</i> (43)	<i>M</i> (42)	<i>M</i> (40)	<i>M</i> (37)
		<i>SD</i> (9.5)	<i>SD</i> (8.1)	<i>SD</i> (7.9)	<i>SD</i> (7.5)
Service Duration	0-5	29	12	18	14
	6--15	51	27	85	60
	16-25	86	26	65	26
	26+	59	10	41	4
Service Rank	Superintendent	2	0	3	2
	Inspector	49	15	99	42
	Sergeant	28	10	24	17
	Constable	146	50	83	43
Status of Physical Injuries	None	80	0	9	16
	Severe	12	0	49	9
	Moderate	54	0	38	8
	Mild	79	0	113	27
Mental Health Training Course	Yes	19	2	16	9
	No	206	73	193	95
Psychological Debriefing	Yes	8	1	21	7
	No	217	74	188	97
Psychological Consultation	Yes	10	1	45	23
	No	215	74	164	81

Actual figures and mean values are presented in the table above. According to the data, the average age of the sample was 41 years (40 years for females and 43 for males). There was

no specific criterion for the sample selection except that the fresh recruits were also included from the training centres. One hundred and seventy five females (104 from England, 75 from PK) responded to the survey. The majority of the female police officers had not received a psychological debriefing as well as mental health training. Similarly very few females reported having a history of seeking psychological support. Male police officers, on the other hand, had received injuries to a greater extent. Although most reported having experienced minor ones (see table 7-1). Moreover, the comparison of figures from both forces indicated that there was no significant difference in terms of mental health training or seeking psychological debriefing. One of the explanations for the evidence in the UK comes from the fact that west Yorkshire has stopped providing debriefings due to their lack of suitability and use. This was affirmed by the force psychiatrist.

As can be seen, two variables had missing values i.e., trauma exposure (missing = 13) and trauma impact (missing = 76). After sorting out the missing data (using the list wise exclusion method), the findings were still comparable (Allison, 2000) but the results related to trauma exposure and impact must be taken into consideration with caution.

## 7.6 Sample distribution across Gender

The current study was carried out on an unequal gender size to example effects (if any) of the gender. Although the distribution was unequal, it was comparable. Following cross tabulation shows the spread of the sample across gender and nationality.

Table 7-2: Cross gender distribution of sample (n = 613)

		Gender		Total
		Female	Male	
Nationality	UK Police	104(58%)	209(48%)	313(51%)
	PK Police	75(42%)	225(52%)	300(49%)
Total		179(29%)	434(71%)	613

The table presents the distribution of police officers across gender and nationality. As it can be seen from the figures, the majority of sample was males (UK = 209; PK = 225). Females comprised a comparable number of sample representations.

## 7.7 Traumatic Events List

In order to examine the type of events which these police officers were exposed to, frequency tabulation was calculated to estimate the proportion of the frequency and impact of various incidents which were rated as most traumatic.

Table 7-3: Descriptive distribution across types of trauma incidents (n = 613)

Events Checklist	Frequency Rate (More than once a month)	Impact Rate (Large to Extreme)
Burns/Scars	5.6%	2.6%
Dead body of a child	6.6%	10.6%
Dead body of an adult	8.9%	4.6%
Body parts	7.1%	7.6%
Attended someone dying	6.4%	8.4%
Accidental deaths	7.8%	4.6 %
Victim was known to you	6.2%	4.0%
Any event which reminded you of someone	9.5%	10.8%
Multiple deaths	8.3%	7.1%
Deaths of most family members in an accident	7.5%	6.6%
Media criticism about some case	8.5%	24.1%
Strong unpleasant smell which reminded you of some previous event	7.9%	8.0%
Dealing with violent crowd	7.3%	16.9%
Time urgency in investigation of a case	14.8%	10.9%
Child Rape	9.5%	7.5%
Adult Rape	14.3%	6.5%
Serious Assault	11.3%	4.7%
Self-Injury	6.7%	7.1%
Exchange of fire in a criminal combat	8.4%	4.5%
On duty death of a colleague	8.3%	8.6%
Dealing with emotionally disturbed victims/families	13.8%	7.8%
Incomplete investigations/unresolved cases	12.5%	6.4%
Any event whose sight, smell or sound was disturbing	8.8%	7.7%
Dealing with child witness or victims	11.9%	8.0%
Dealing with terror investigation	8.7%	5.0%
Public riot	8.7%	13.8%
Multiple deaths involving families	7.4%	5.6%
Traffic/Road Accident	11.7%	3.9%

Table 7.3 shows the frequency of occurrence of incidents (only most traumatic incidents are described here) along with their psychological impact (based on the five scale Likert ratings). As it can be seen from the figures, a large number of incidents were considered as traumatic by police from both forces. In particular were those related to the media handling and crowd handling.

## 7.8 Trauma exposure across gender, nationality and service duration

The exposure to trauma was assessed by a trauma subscale within a self-developed inventory. An Independent Sample t-test was carried out to look at the gender wise differences on scores of trauma exposure

### *Sex wise distribution*

Table 7-4: Sex and Exposure to trauma events

		<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Exposure	Females	177	25.46	9.84	7.350	.001
	Males	423	34.79	15.64		

df = 598

The results indicate a significant difference between male and female police officers on the level of exposure to trauma. According to the mean differences, male police officers ( $M^* = 34.76$ ,  $SD = 15.64$ ) had comparatively greater exposure to traumatic incidents than females ( $M = 25.46$ ,  $SD = 9.84$ ).

### *Nationality wise distribution*

Similar to the table above, nationality wise trauma exposure index is shown as below:

Table 7-5: Nationality and Trauma Exposure

		<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Exposure	UK Police	303	23.36	9.84	18.009	.001
	PK Police	296	40.89	15.64		

df = 598

The results indicate a significant difference between British and Pakistani police officers on the level of exposure to trauma. According to the mean differences, Pakistani police officers ( $M = 40.89$ ,  $SD = 15.64$ ) were exposed to a greater number of traumatic incidents than the British police officers ( $M = 23.36$ ,  $SD = 9.84$ ).

*Service wise distribution*

Following table indicates ANOVA across duration of service. As it is indicated in the table 7-1, there were four sub groups of the service duration, ANOVA test was considered appropriate.

Table 7-6: One way analysis of variance (ANOVA) of Service duration and Exposure

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	4787.783	4	1196.946		
Within Groups	126318.482	595	212.30	5.368	.000
Total	131106.265	599			

The table indicates significant differences between all service duration categories on basis of exposure to critical incidents or events. Following diagram illustrates further.

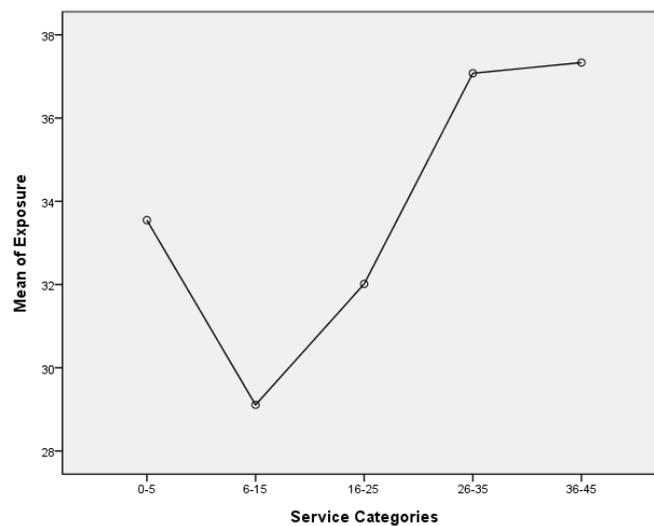


Figure 7-3: One way analysis of variance (ANOVA) of Service duration and Exposure

A simplified form of the ANOVA is shown above, where the interaction effect appears to be minimal. As it can be seen, the groups with service duration between 6-15 had relatively less exposure to traumatic events, than group with high mean scores i.e., 26+

Table 7-7 Post Hoc ANOVA on service categories and trauma exposure (n=613)

(I) Service Categories	(J) Service Categories	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0-5	6-15	4.439	1.967	.279	-1.64	10.52
	16-25	1.533	1.994	.964	-4.63	7.69
	26-35	-3.529	2.225	.642	-10.40	3.35
	36-35	-3.785	8.583	.996	-30.31	22.74
6-15	0-5	-4.439	1.967	.279	-10.52	1.64
	16-25	-2.906	1.424	.385	-7.31	1.49
	26-35	-7.968*	1.733	.000	-13.32	-2.61
	36-45	-8.225	8.469	.918	-34.39	17.94
16-25	0-5	-1.533	1.994	.964	-7.69	4.63
	6-15	2.906	1.424	.385	-1.49	7.31
	26-35	-5.062	1.763	.084	-10.51	.39
	36-45	-5.318	8.475	.983	-31.51	20.87
26-35	0-5	3.529	2.225	.642	-3.35	10.40
	6-15	7.968*	1.733	.000	2.61	13.32
	16-25	5.062	1.763	.084	-.39	10.51
	36-45	-.256	8.533	1.000	-26.62	26.11
36-45	0-5	3.785	8.583	.996	-22.74	30.31
	6-15	8.225	8.469	.918	-17.94	34.39
	16-25	5.318	8.475	.983	-20.87	31.51
	26-35	.256	8.533	1.000	-26.11	26.62

\*. The mean difference is significant at the 0.05 level.

The post hoc analysis for group differences in terms of service duration and trauma exposure indicated significant differences between those having service duration of 6-15 and 26-35, 26-35 and 6-15.

### 7.9 Trauma impact across gender, nationality and service duration

The impact to trauma was assessed by a trauma subscale within a self-developed inventory. Independent Sample t test was carried out to look at the gender wise differences on scores of trauma exposure

#### *Gender wise differences*

The differences on trauma's psychological impact in terms of gender are shown in the table below which represents t values.

Table 7-8: Sex and Impact of exposure to the trauma events

		<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Impact	Females	156	41.86	19.39	4.323	.001
	Males	380	51.89	26.20		

df = 598

The results indicate a significant difference between male and female police officers on the amount of impact after exposure to a wide range of trauma events. According to mean differences, male police officers ( $M = 51.89$ ,  $SD = 26.20$ ) had comparatively greater impact to traumatic incidents than the female police officers ( $M = 41.86$ ,  $SD = 19.39$ ).

#### *Nationality wise differences*

The differences on trauma's psychological impact in terms of gender are shown in the table below which represents t values.

Table 7-9: Nationality and Trauma Impact

		<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Impact	UK Police	260	29.68	18.83	26.626	.001
	PK Police	276	67.14	13.439		

df = 598

The results in table 7-9 indicate a significant difference between British and Pakistani police officers on the level of exposure to trauma. According to mean differences, Pakistani police officers ( $M = 67.14$ ,  $SD = 13.439$ ) had comparatively greater exposure to traumatic incidents than UK police personnel ( $M = 29.68$ ,  $SD = 18.83$ ).

*Service wise distribution*

Table 7-10: One way analysis of variance (ANOVA) of Service duration and Impact of trauma events

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	14781.773	4	3695.443		
Within Groups	314536.807	531	592.348	6.239	.001
Total	329318.580	535			

This table suggests significant group difference in the mean scores of trauma impact and duration of service

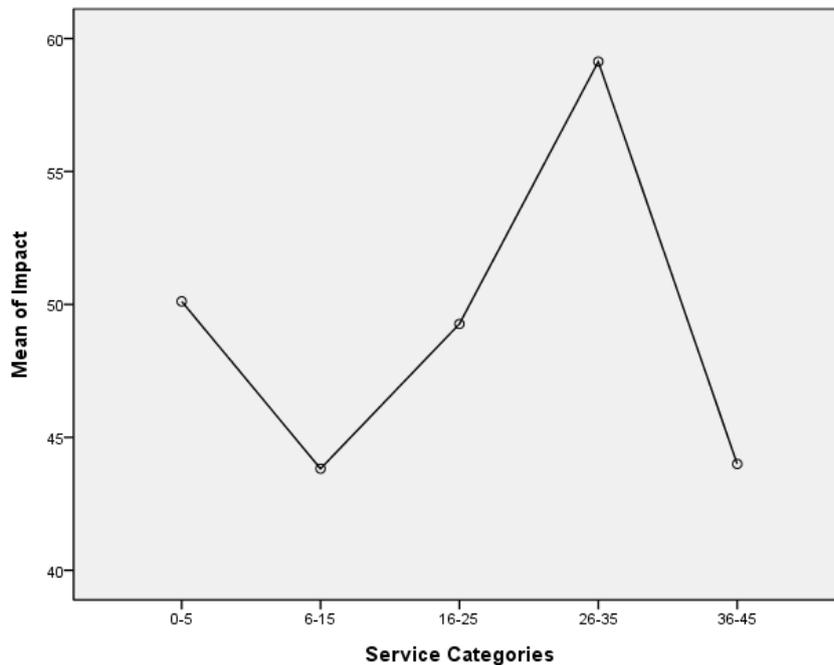


Figure 7-4: One way analysis of variance (ANOVA) of Service duration and Exposure

In other words, there is significant interaction effect between mean scores of trauma impact scale and service duration (see figure 7:4)

Table 7-11: Post Hoc ANOVA on service categories and trauma impact (n=613)

(I) Service Categories	(J) Service Categories	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0-5	6-15	6.293	3.378	.483	-4.15	16.73
	16-25	.848	3.448	1.000	-9.81	11.51
	26-35	-9.019	3.879	.250	-21.01	2.97
	36-45	6.114	17.454	.998	-47.84	60.07
6-15	0-5	-6.293	3.378	.483	-16.73	4.15
	16-25	-5.445	2.524	.326	-13.25	2.36
	26-35	-15.312*	3.087	.000	-24.85	-5.77
	36-45	-.179	17.295	1.000	-53.64	53.28
16-25	0-5	-.848	3.448	1.000	-11.51	9.81
	6-15	5.445	2.524	.326	-2.36	13.25
	26-35	-9.867*	3.163	.047	-19.65	-.09
	36-45	5.266	17.309	.999	-48.24	58.77
26-35	0-5	9.019	3.879	.250	-2.97	21.01
	6-15	15.312*	3.087	.000	5.77	24.85
	16-25	9.867*	3.163	.047	.09	19.65
	36-45	15.133	17.400	.944	-38.65	68.92
36-45	0-5	-6.114	17.454	.998	-60.07	47.84
	6-15	.179	17.295	1.000	-53.28	53.64
	16-25	-5.266	17.309	.999	-58.77	48.24
	26-35	-15.133	17.400	.944	-68.92	38.65

\*. The mean difference is significant at the 0.05 level.

The post hoc analysis for group differences in terms of service duration and trauma impact showed significant differences between those having service duration of 6-15 and 26-35, 16-25 and 26-35, 26-35 and 6-15/16-25.

### 7.10 Mental Health across gender, nationality and service duration

Mental Health was considered as an independent variable besides resilience to understand how the trauma variants can impact the mental health of officers. Following analyses suggests strong differences.

#### *Gender wise distribution*

Table 7-12: Mental Health Scores (GHQ-12) on basis on gender

		<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Mental Health	Females	179	24.83	5.621	2.965	.003
	Males	434	26.32	5.678		

df = 598

The results indicate a significant difference between male and female police officers on the basis of their scores on GHQ scale. According to mean differences, male police officers ( $M = 24.83$ ,  $SD = 5.621$ ) had comparatively better mental health than the female police officers ( $M = 26.32$ ,  $SD = 5.678$ ).

#### *Nationality wise distribution*

Table 7-13: Nationality and Mental Health

		<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Mental Health	UK Police	313	25.61	6.026	1.195	n.s.
	PK Police	300	26.16	5.330		

df = 611

The results indicate no difference between UK and Pakistani police officers on the level of mental health.

*Service wise distribution*

Similarly, in order to see the level of mental health amongst police officers of various service durations, one way ANOVA was carried out.

Table 7-14: One way analysis of variance (ANOVA) of Service duration and Mental Health

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	228.612	4	57.153		
Within Groups	19638.931	608	32.301	1.769	n.s.
Total	19867.543	612			

The analysis suggests non-significant group differences on the mental health scale in police officers on the basis of their service duration.

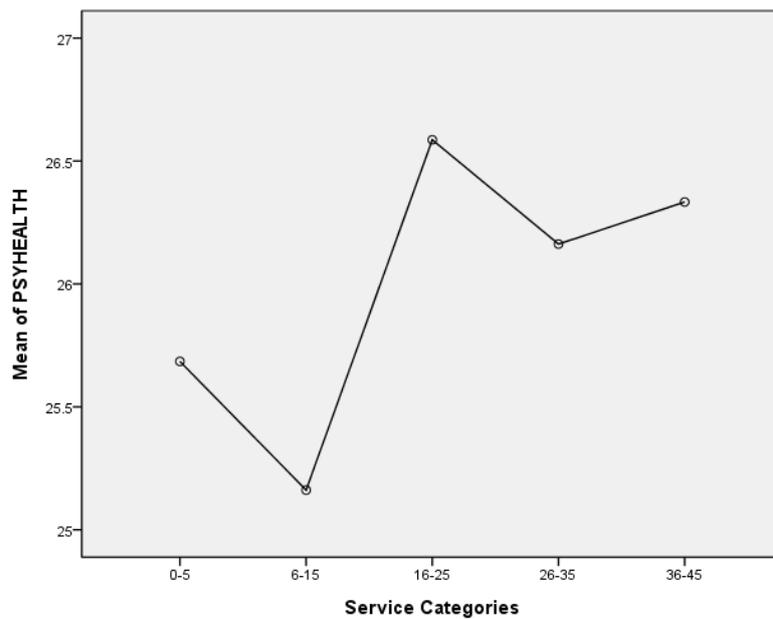


Figure 7-5: Group difference on service and MH

The mean interaction however indicated that police officers with more than 26 years of experience had better mental health scores as compared to others.

Table 7-15: Post Hoc ANOVA on service categories and mental health (n=613)

(I) Service Categories	(J) Service Categories	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0-5	6-15	.523	.766	.977	-1.84	2.89
	16-25	-.901	.776	.853	-3.30	1.50
	26-35	-.477	.856	.989	-3.12	2.17
	36-45	-.648	3.348	1.000	-10.99	9.70
6-15	0-5	-.523	.766	.977	-2.89	1.84
	16-25	-1.425	.551	.155	-3.13	.28
	26-35	-1.001	.660	.681	-3.04	1.04
	36-45	-1.172	3.303	.998	-11.38	9.03
16-25	0-5	.901	.776	.853	-1.50	3.30
	6-15	1.425	.551	.155	-.28	3.13
	26-35	.424	.671	.982	-1.65	2.50
	36-45	.253	3.305	1.000	-9.96	10.47
26-35	0-5	.477	.856	.989	-2.17	3.12
	6-15	1.001	.660	.681	-1.04	3.04
	16-25	-.424	.671	.982	-2.50	1.65
	36-45	-.171	3.325	1.000	-10.45	10.10
36-45	0-5	.648	3.348	1.000	-9.70	10.99
	6-15	1.172	3.303	.998	-9.03	11.38
	16-25	-.253	3.305	1.000	-10.47	9.96
	26-35	.171	3.325	1.000	-10.10	10.45

\*. The mean difference is significant at the 0.05 level.

The post hoc analysis for service duration and mental health showed no significant group differences.

### 7.11 Coping ways across gender, nationality and service duration

Following section describes ANOVA results across coping ways (internal, external, none and both) across three variables i.e., gender, nationality and service duration.

#### *Cross Tabulation of Gender and Coping Ways*

Table 7-16: Chi-Square distribution of Coping Ways across Gender in study sample

Gender	Coping Ways			
	None	Internal	External	Both
Female	58(24%)	35(32%)	36(43%)	50(38%)
Male	181(76%)	75(68%)	48(57%)	130(72%)
Total (n)	239	110	84	180

$$\chi^2 = 10.932, df=3, p= .012$$

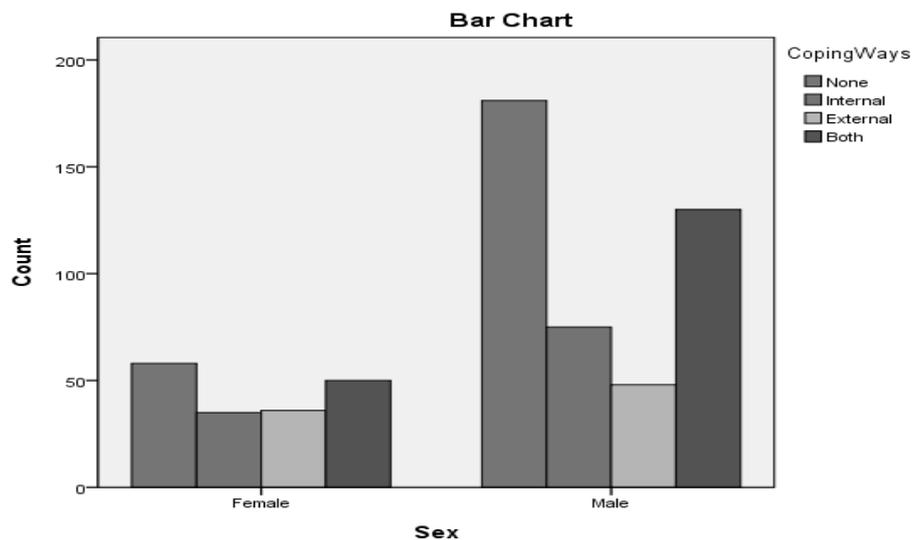


Figure 7-6: Sex wise distribution across coping ways

As indicated in the table above, there was significant difference across gender when distributed according to their ways of coping. According to the Chi Square value shown in the table, male police officers tended to use a combination of internal and external coping ways while female police officers appeared to use the coping skills to a lesser extent.

### Nationality and Coping Ways

The Chi Square distribution across nationality and coping ways is described in the table below:

Table 7-17: Chi-Square distribution of Coping ways across nationality in study sample

Nationality	Coping Ways				Total
	None	Internal	External	Both	
UK Police	17(7%)	96(87%)	32(38%)	168(93%)	313
PK Police	222 (93%)	14(13%)	52(62%)	12(7%)	300
Total	239	110	84	180	613

$$\chi^2 = 376.820, df=3, p=.001$$

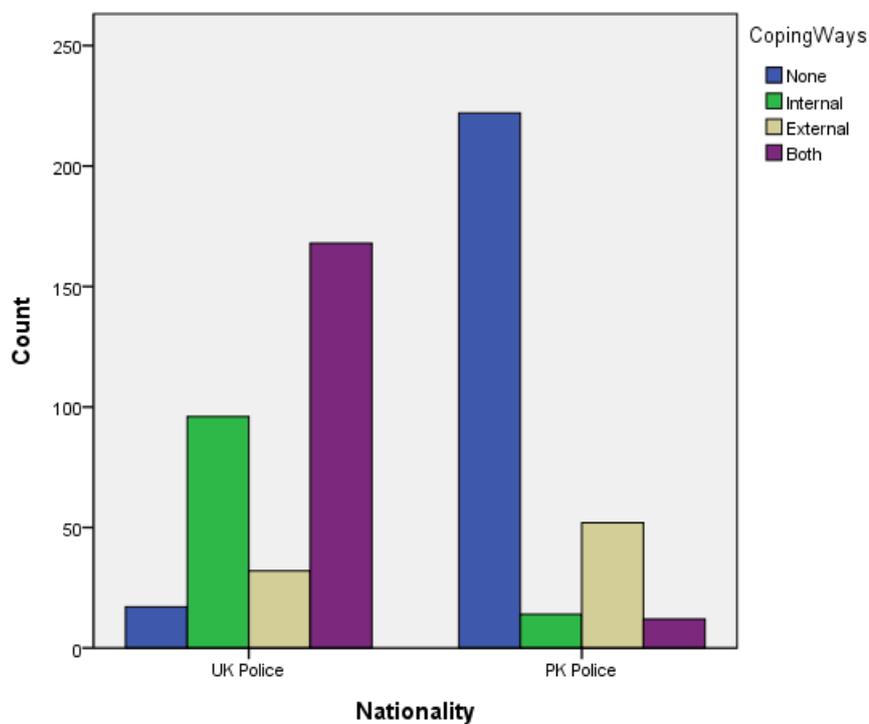


Figure 7-7: Sex wise distribution across coping ways

The cross distribution across nationality and coping ways suggested a significant distribution. According to the value of Chi Square, the Pakistani police officers used less coping strategies as compared to the British Sample. As it can be seen from the graphical presentation, Pakistani police officers used external coping skills while British police officers used Internal coping skills widely.

*Service Wise distribution across Coping Ways*

Following table provides information about the chi square analysis showing distribution of sample across service and coping ways.

Table 7-18: Chi-Square distribution of Coping ways across nationality in study sample

Service Duration	Coping Ways				Total
	None	Internal	External	Both	
0-5	37(15%)	12(11%)	9(11%)	15(8%)	73(12%)
6-15	67(28%)	53(48%)	29(35%)	74(41%)	223(36%)
16-25	84(35%)	27(25%)	29(35%)	63(35%)	203(33%)
26-35	49(21%)	17(16%)	17(20%)	28(16%)	111(18%)
36-45	2(1%)	1(1%)	0	0	3(1%)
Total	239	110	84	180	613

$\chi^2 = 21.962, df=12, p= .038$

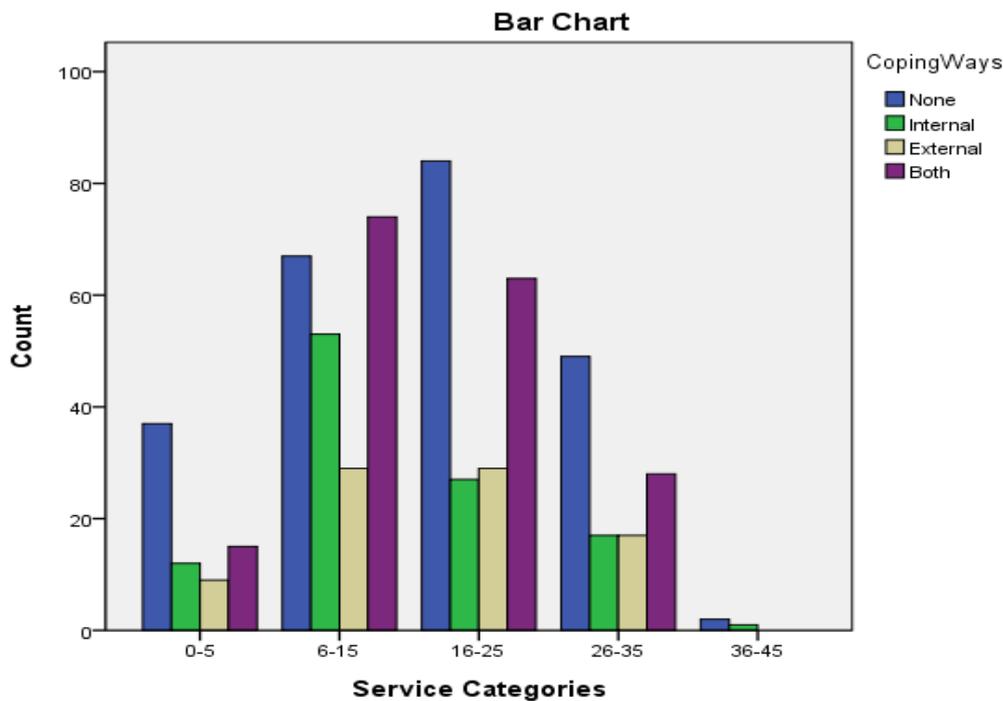


Figure 7-8: Graphical Illustration of Coping ways and Service Duration

Comparison of sample distribution according to the service duration indicated significant difference. As clear from the graph, officers who had service experience of 0-5 used a combination of both internal and external coping skills, while the use of coping skills was comparatively higher in group with 6-15 years of service. The police officers who had service experience of 36-45 used less coping strategies than others.

### 7.12 Cross National Comparison on Trauma Scale (Exposure and Impact)

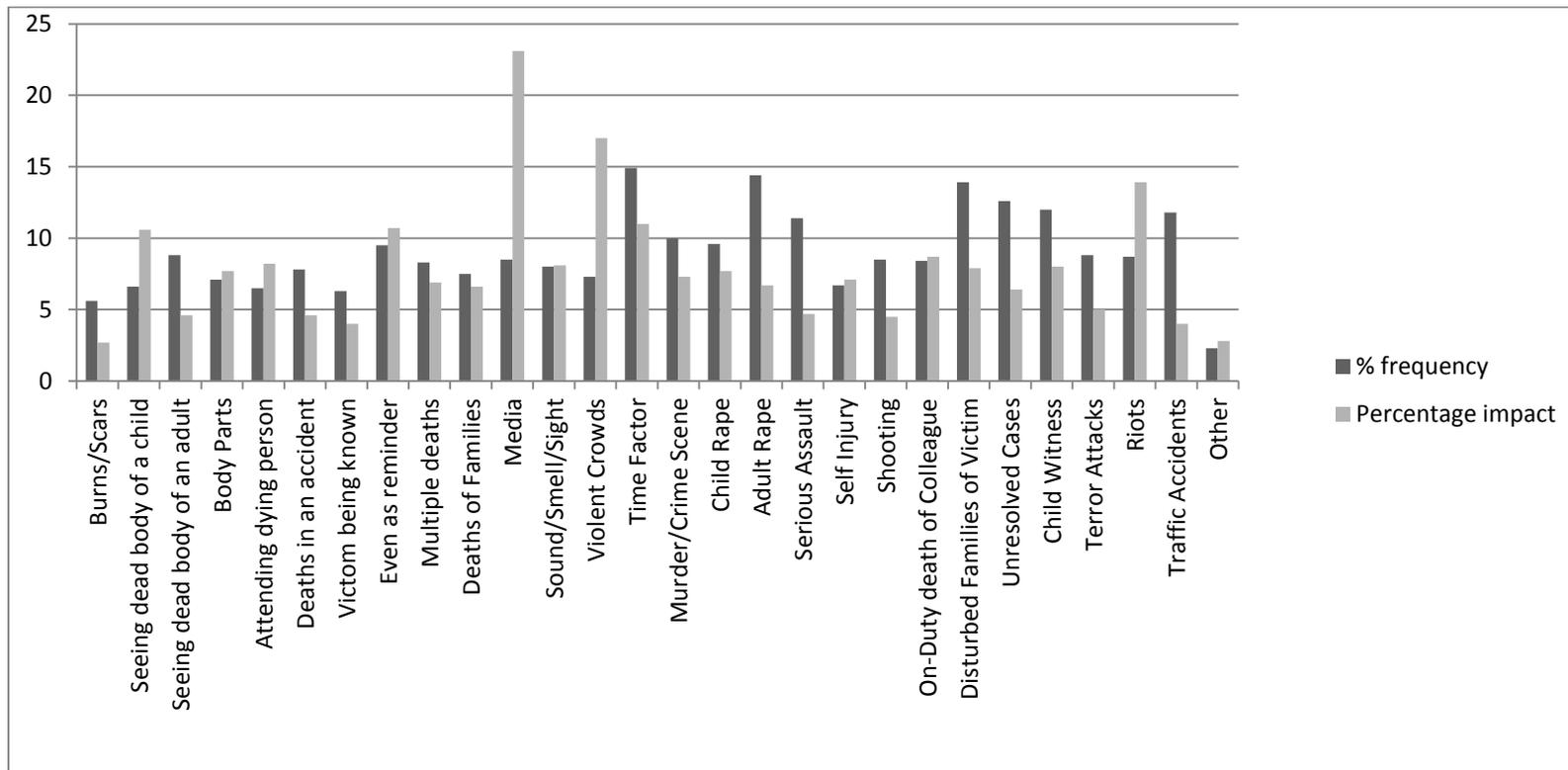


Figure 7-9: Cross National Comparison on Trauma Scale (Exposure and Impact)

The graph shows descriptive distribution across a list of traumatic experiences. According to graphical distribution, the media pressure was rated as a highly traumatic experience, followed by handling violent crowds, dealing with families, violence against violence (VOV), child and adult cases of rape etc.

### 7.13 Resilience across gender, nationality and service duration

#### *Gender wise differences*

This table gives t test analysis of differences on CSDR-10 scale on basis of gender

Table 7-19: Resilience (CSDR-10) on basis on gender

		<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Resilience	Females	179	36.72	7.197	1.612	n.s.
	Males	434	35.55	8.518		

df = 611

The results indicate a non-significant difference between male and female police officers on the resilience scale. Figures indicate that females are slightly more resilient than their male counterparts are.

#### *Nationality wise distribution*

Table 7-20: Nationality and Mental Health

		<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Resilience	UK Police	313	40.66	5.717	18.385	.000
	PK Police	300	30.92	7.333		

df = 611

The results indicate a significant difference between British and Pakistani police officers in terms of their scores on resilience scale. According to mean differences, UK police officers ( $M = 40.66$ ,  $SD = 5.717$ ) had comparatively greater exposure to traumatic incidents than Pakistani police officers ( $M = 30.92$ ,  $SD = 7.333$ ).

*Service wise distribution*

This table describes ANOVA between service duration groups and CSDR-10 scores

Table 7-21: One way analysis of variance (ANOVA) of Service duration and Resilience

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	668.108	4	167.027		
Within Groups	40144.000	608	66.026	2.530	.04
Total	40812.108	612			

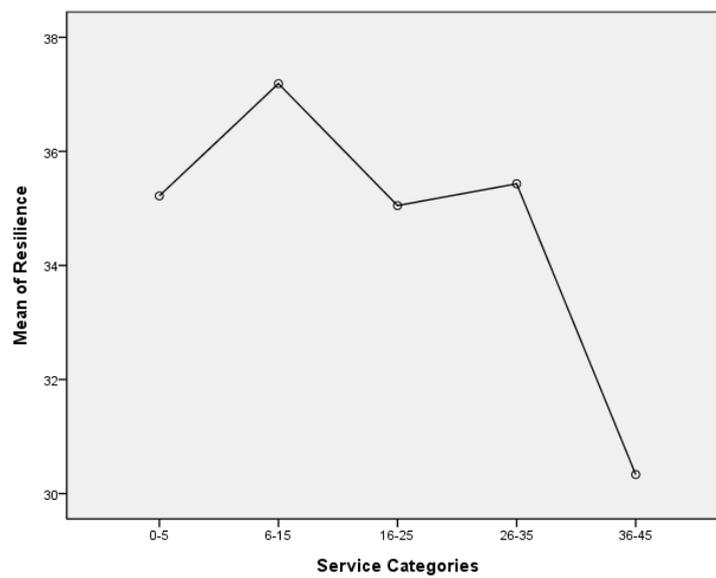


Figure 7-10: Group difference on service and resilience

Analysis of variation across service groups showed significant difference. According to the graph, it is clear that the group with experience of 6-15 scored highest on the resilience scale while the group with 36-45 years scored comparatively less.

## Additional Findings

The study also included some of the aspects of police life such as physical injury, sub dimensions of coping scale, faith and religiosity. Although the analysis indicated in this chapter does not present findings from these components, nationality wise impact of religiosity is presented as follows:

### 7.14 Religious Orientation and influence across nationality

The following two tables describe distribution across questions investigating religious orientation and influence on daily behaviour.

#### *Religious Orientation across nationality*

Table 7-22: Religious Orientation of Police Personnel (n = 613)

Religious Orientation	Nationality		Total
	UK Police	PK Police	
I attend religious services regularly	18(3%)	244(40%)	262(43%)
I pray when I am stressed, or I have need, otherwise I am not religious	50(8%)	48(8%)	98(16%)
I pray on certain religious occasions, or when there is a formal gathering (such as Eid, Christmas, Deewali etc.).	52(8%)	5(1%)	57(9%)
I am not religious	165(27%)	3(1%)	168(27%)

The table suggests that a majority of the participants attended religious duties regularly (43%). Comparison of ratios between Pakistani and British police officers suggested that British police officers were less involved in religious obligations as compared to the Pakistani officers.

*Religious Influence across nationality*

Table 7-23: Religious Influence of Police Personnel (n = 613)

Religious Influence	Nationality		Total
	UK Police	PK Police	
No Influence	98(16%)	7(1%)	105(17%)
A small influence	51(8%)	4(1%)	55(9%)
Some Influence	46(8%)	49(8%)	95(16%)
A lot of Influence	23(4%)	203(33%)	226(37%)
Complete Influence	2(0.3%)	37(6%)	39(6%)
I don't believe in religious practices	87(14%)	0	87(14%)
Missing cases	6(1%)	0	6(1%)

As indicated, the majority of the Pakistani participants were particularly religious and this religious orientation had a strong influence on their day-to-day behaviour. British police personnel, however, believed that they were not particularly religious yet their religious values had some influence on their behaviour.

The way these police personnel cope, might contribute towards their resiliency and general health, but the effect might differ across nationality, gender, length of service, level of responsibilities/duties and physical injuries etc. A two way univariate analysis of variance was carried out to testify the effect of mentioned independent variables on resilience and general health respectively.

### 7.15 Effect of Gender and Physical Injuries status on resilience scores

(2 × 4) Two Way Analysis of Variance (ANOVA): Effect of Gender and Physical Injuries status on resilience scores

The researcher seeking to understand the factors that influence the General mental health observed the status of physical injuries and gender. There were four variations in terms of injuries, i.e., those police personnel who reported having a) no injuries, b) First degree Injuries, c) Second degree injuries, and finally d) Third degree injuries.

Table 7-24: Mean scores on Resilience Scale by Gender and Degree of Injuries

		No Injuries	First Degree Injuries	Second Degree	Third Degree
Gender	Female Police Officers	M 24.24	M 19.11	M 22.13	M 22.56
		SD 5.6	SD 7.53	SD 9.19	SD 5.17
	Male Police Officers	M 22.06	M 20.73	M 21.73	M 21.93
		SD 5.19	SD 7.53	SD 5.59	SD 5.64

Two way analysis of variance found that the level of injuries did have a significant affect ( $F(3, 603) = 3.010, p = 0.01, \eta^2 = 0.015$ ). Police officers, who had reported having received no injuries had comparatively improved mental health state than those reporting having encountered injuries (see Table 7:1). The main effect for gender and status of physical injuries was non-significant; ( $F(3, 603) = 1.245, p = 0.03, \eta^2 = 0.06$ ).

2 × 4 Two Way Analysis of Variance (ANOVA): Effect of Nationality and Physical Injuries status on resilience scores

Similar analysis was carried out to see variation in terms of nationality. The results are as follows:

Table 7-25: Mean scores on Resilience Scale by Nationality and Degree of Injuries

		No Injuries	First Degree Injuries	Second Degree	Third Degree
Nationality	British	M 23.96	M 20.19	M 22.00	M 23.15
		SD 7.04	SD 7.46	SD	SD 5.23
	Pakistani	M 23.03	M 22.08	M 21.56	M 19.65
		SD 5.19	SD 7.94	SD 5.59	SD 5.41

The interaction effect between nationality and status of physical injuries was significant; (F (3, 603) = 3.620, p=0.03,  $\eta^2 = 0.01$ ).

## 7.16 Identifying predictor variables

In order to look at whether there is any variation in terms of service tenure, post hoc analysis (ANOVA) and Pearson product moment correlation was carried out and the following plot was generated:

*Relationship between trauma exposure, psychological impact, mental health, coping and resilience*

Table 7-26: Pearson product moment correlation between predictor variables and resilience (n = 613)

	Resilience (CDRS)
Mental Health (GHQ-12)	-.238**
Internal Coping Resources	.567**
External Coping Resources	.296**
Age (years)	-.107**
Length of Service (years)	-.102*
Exposure	-.194**
Impact	-.482**

\*\*p<.01, \*p<.05

The correlation between significant study variables is presented in the table above. As it can be seen, there was a significant inverse relationship between Mental Health and Resilience scores ( $r = -.238^{**}$ ) suggesting that better mental health is associated with better resiliency.

A positive and significant relationship was observed between both internal and external coping approaches with resilience ( $r = .567^{**}$  and  $.296^{**}$  respectively) suggesting that police personnel who use both coping resources have better resilience. The results of the correlation between age, length of service, trauma exposure and event's impact was inverse, suggesting an inverse relationship across these variables with resilience.

Therefore, younger age, less years of experience, less exposure and less impact were associated with better resilience. It is to be noticed that the influence of age on resilience was significant at .05 alpha levels.

### 7.17 Main effects of predictor variables on resilience

In order to investigate predictors of resilience, the following steps were followed:

Step 1: A simple regression analysis enter method: To identify predictors

Step 2: A multiple regression analysis stepwise method: To identify predictors that strongly influence resiliency

Step 3: Hierarchical Multiple Regression: To testify the model after controlling for demographics and trauma correlates

The rationale for using three step regression analyses was to identify the strength of identified predictor towards resilience. The above mentioned regression analysis identified, a number of variables which were strongly associated with resilience, and were predicted to influence it in a positive way.

Table 7-27: Hierarchical Multiple Regression ANOVA (n = 594)

<i>Model</i>		<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>Sig.</i>
1	Regression	16188.531	13	1245.272	30.293	.000 <sup>a</sup>
	Residual	24623.576	599	41.108		
	Total	40812.108	612			
2	Regression	19532.975	16	1220.811	34.193	.000 <sup>b</sup>
	Residual	21279.133	596	35.703		
	Total	40812.108	612			
3	Regression	20393.308	18	1132.962	32.959	.000 <sup>c</sup>
	Residual	20418.800	594	34.375		
	Total	40812.108	612			

After controlling for demographic variables, and trauma related variables, the third model was statistically significant ( $F_{18, 594}=32.959$ ,  $p < 0.001$ ) with an adjusted R square = .49.  $\Delta R$  value was .02. This shows that both internal and external coping contributed to a 0.2% variance in resilience. The beta values<sup>28</sup>, however, revealed that only internal coping [ $F(1, 564) = 3.959$ ,  $p = .02$ ,  $\eta^2 = .01$ ] was a strong predictor of resilience.

<sup>28</sup> The Standardized Beta Coefficients give a measure of the contribution of each variable to the model. A large value indicates that a unit change in this predictor variable has a large effect on the criterion variable. The t and Sig (p) values give a rough indication of the impact of each predictor variable – a big absolute t value and small p value suggests that a predictor variable is having a large impact on the criterion variable.

Table 7-28: 2x4 way ANOVA to examine effects of MH and Coping approach on Resilience (n = 605)

<i>Source</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>Sig.</i>	<i>Eta</i>
Corrected Model	13482.728 <sup>a</sup>	7	1926.104	42.639	.000	.330
Intercept	604496.911	1	604496.911	13381.959	.000	.957
Mental Health	1441.856	1	1441.856	31.919	.000	.050
Coping approach	9230.876	3	3076.959	68.116	.000	.252
MH * Coping	170.877	3	56.959	1.261	.287	.006
Error	27329.380	605	45.173			
Total	830587.000	613				
Corrected Total	40812.108	612				

a. R Squared = .330 (Adjusted R Squared = .323)

The findings revealed a significant positive main effect of mental health status on resilience [F (1, 605) = 31.92, p= .00,  $\eta^2 = .05$ ] (see table 7-27). Mean values in the descriptive analysis provided further group variations (table 7-27). Similarly there was a significant between-groups difference in coping approaches and resilience [F (3, 605) = 68.116, p= .00,  $\eta^2 = .25$ ] (see table 7-27). This reflects that coping approaches also have significant main effect on resilience.

The interaction effect of Mental Health with coping ways was not significant [F (3, 613) = 1.261, p= .29,  $\eta^2 = .01$ ]. Therefore the null hypothesis is accepted which states that there is no difference between subjects with possibility of particular mental health status and respective coping approach preference.

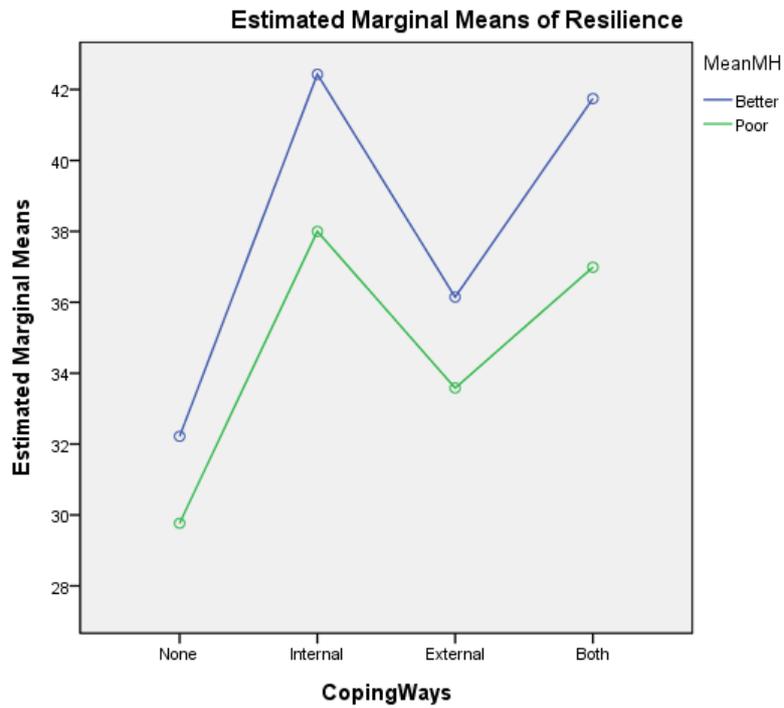


Figure 7-11 Marginal Means of Resilience

This figure shows that the two scales i.e., GHQ and Coping approaches, do not interact to create a significant difference in resilience scores. Mean scores, however, suggest significant independent effect. Thus it can be concluded that better mental health is associated with internal coping, external coping and/or both whereas poor mental health might be associated with using no coping strategy in particular.

### 7.18 Post Hoc ANOVA on coping approaches

A significant main effect was observed in using a coping approach with resilience scores, post hoc analysis was conducted to examine group differences within this variable. The Scheffé method<sup>29</sup> was carried out to investigate the main effects. In this analysis, the following combinations were examined and were found to be statistically significant:

Table 7-29: Post Hoc ANOVA on coping approaches (n=605)

(I) Coping Ways	(J) Coping Ways	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
None	Internal	-10.48*	.774	.000	-12.65	-8.31
	External	-3.85*	.853	.000	-6.24	-1.46
	Both	-8.51*	.663	.000	-10.37	-6.65
Internal	None	10.48*	.774	.000	8.31	12.65
	External	6.63*	.974	.000	3.90	9.36
	Both	1.96	.813	.122	-.32	4.24
External	None	3.85*	.853	.000	1.46	6.24
	Internal	-6.63*	.974	.000	-9.36	-3.90
	Both	-4.67*	.888	.000	-7.16	-2.18
Both	None	8.51*	.663	.000	6.65	10.37
	Internal	-1.96	.813	.122	-4.24	.32
	External	4.67*	.888	.000	2.18	7.16

Based on observed means: The error term is Mean Square (Error) = 45.173. \*. The mean difference is significant at the .05 level.

As shown in the table above, the group differences between “none”, “internal”, “external” and “both” were statistically significant at .05 levels. This combination of main effects is elaborated in the figure 7.12.

<sup>29</sup> This method is deployed when there is unequal sample size

### 7.19 Interaction effect of coping ways and resilience (post hoc analysis)

Post Hoc test was carried out to see the interaction effect of coping ways with resilience. Following diagram represents the interaction.

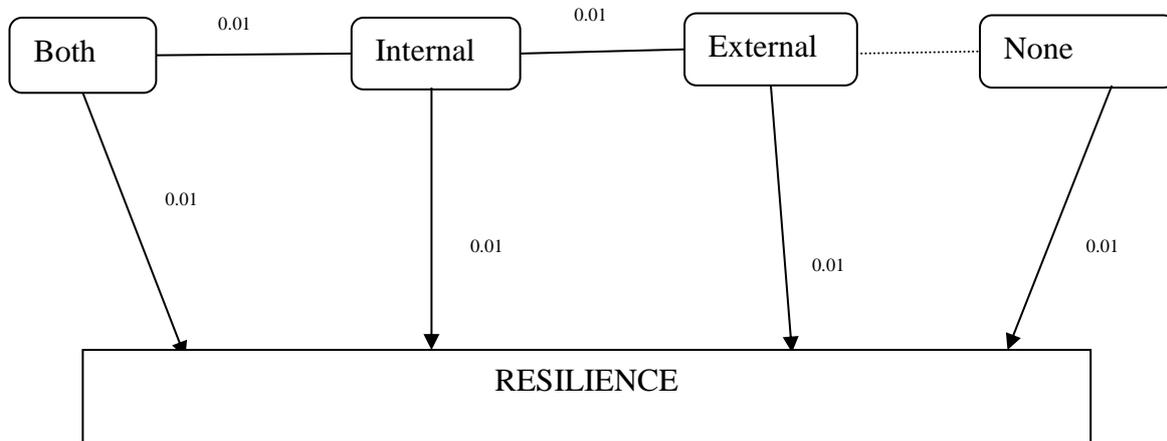


Figure 7-12: Interaction effect of Coping ways and resilience (Post Hoc Analysis)

This figure simplifies the description of main and interaction effects. As it can be seen, there was a strong difference ( $p < 0.01$ ) between the following groups as depicted in post hoc analysis:

1. Both and No coping approach
2. Both and External Coping approach
3. Internal and External Coping approach
4. Internal and External Coping approach

7.20 Main effects of multiple independent variables on resilience (n- way analysis of variance)

The study also examined the main effects of multiple independent variables on resilience in police personnel (see table 7-27, 28). These included Mental Health, Coping ways, Exposure and Psychological Impact.

Table 7-30: Main Effects of multiple independent variables on Resilience (n=605)

<i>Source</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>Sig.</i>	<i>ES</i>
Corrected Model	25423.997a	48	529.667	19.413	.000	.623
Intercept	98667.856	1	98667.856	3616.342	.000	.865
MH	75.614	1	75.614	2.771	.097	.005
Coping	1026.314	3	342.105	12.539	.000	.063
Exposure	216.027	2	108.013	3.959	.020	.014
Impact	381.894	2	190.947	6.999	.001	.02
MH * Coping	75.500	3	25.167	.922	.430	.005
MH * Exposure	28.733	2	14.367	.527	.591	.002
MH * Impact	104.745	2	52.373	1.920	.148	.007
Coping * Exposure	1150.683	6	191.780	7.029	.000	.070
Coping * Impact	1581.876	6	263.646	9.663	.000	.093
Exposure * Impact	413.078	3	137.693	5.047	.002	.026
MH * CopingA * Exposure	356.924	3	118.975	4.361	.005	.023
MH * CopingA * Impact	296.440	5	59.288	2.173	.056	.019
MH * Exposure * Impact	18.532	2	9.266	.340	.712	.001
CopingA * Exposure * Impact	413.475	4	103.369	3.789	.005	.026
MH * CopingA* Exposure * Impact	152.718	3	50.906	1.866	.134	.010
Error	15388.111	564	27.284			
Total	830587.000	613				
Corrected Total	40812.108	612				

a. R Squared = .623 (Adjusted R Squared = .591)

In this analysis, mental health was found to have no significant interaction, unlike the previous one (see table 8a), whereas psychological impact [F (1, 564) = 6.999, p= .00,  $\eta^2 = .02$ ], exposure [F (1, 564) = 3.959, p= .02,  $\eta^2 = .01$ ] and coping ways [F (1, 564) = 12.539, p= .00,  $\eta^2 = .06$ ] had a significant independent effect on resilience scores. This reflects that when combined with multiple factors such as trauma exposure and impact, the mental health has little or no influence. The interactional effects of a) Coping approaches and Exposure [F (1, 564) = 12.539, p= .00,  $\eta^2 = .06$ ], b) Coping approaches and psychological impact [F (1, 564) = 12.539, p= .00,  $\eta^2 = .06$ ], c) Psychological Impact and Exposure [F (1, 564) = 12.539, p= .00,  $\eta^2 = .06$ ], d) Mental Health, Coping approaches and Exposure [F (1, 564) = 12.539, p= .00,  $\eta^2 = .06$ ], and lastly e) Mental Health, Coping approaches and Psychological Impact [F (1, 564) = 12.539, p= .00,  $\eta^2 = .06$ ] showed significant main effects on resilience scores.

Table 7-31: Main Effects of multiple independent variables on Resilience (n=605)

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>Sig.</i>	<i>ES</i>
Contrast	386.346	1	386.346	14.160	.000	.024
Error	15388.111	564	27.284			

As shown above, the overall model (see table 8b) was statistically significant [F (1, 564) = 14.160, p= .00,  $\eta^2 = .02$ ] and explained 59% variance in resilience scores (Adjusted R Squared = .591).

## 7.21 Determinants of resilience

Since the study is exploratory, the statistical design chosen was primarily correlation, regression analysis and MANOVA (to examine cross national variation). Prior to the hypothesis testing, it was ensured that the parametric requirements of the scales were set.

The third research question was related to examining predictors of resilience. In the previous section, it appeared that mental health contributes significantly towards resiliency. In order to investigate the predictors of resilience, the following steps were followed:

Step I: A simple regression analysis enter method: To identify predictors.

Step 2: A multiple regression analysis stepwise method: To identify predictors which strongly influence resiliency?

Step 3: Hierarchical Multiple Regression: To testify the model.

The purpose of using the three step regression method is to identify those set of variables that have significantly high influence on the resilience scale therefore, this analysis helped in identifying strong predictors to determine effective resiliency.

## 7.22 Simple Regression Analysis

The simple regression model was used as an initial step to evaluate the relationships between sets of independent variables and a dependent variable (resilience). The following variables were included in the analytical model:

1. Age
2. Sex
3. Nationality
4. Length of Service
5. Ranks (dummy coded into 04 categories)
6. 0-5 years
7. 16-25 years
8. 26-35 years
9. 36-45 years
10. Mental Health Course (MHC)
11. Psychological Consultation
12. Psychological Debriefing
13. Religious Orientation
14. Religious Influence
15. Faith/Belief System
16. Trauma Exposure
17. Trauma Exposure Impact
18. Mental Health
19. Usage of Internal Coping Resources
20. Usage of External Coping Resources

Table 7-32: Simple Regression Analysis of predictor variables on resilience scale

Model	Unstandardized Coefficients		Standardized Coefficients		<i>t</i>	Sig.
	<i>B</i>	<i>SE</i>	<i>Beta</i>			
1	(Constant)	42.444	4.776		8.887	.000
	MH	-.295	.045	-.206	-6.564	.000
	Internal	.308	.061	.236	5.019	.000
	External	.016	.070	.008	.229	.819
	Nationality	-9.685	1.130	-.593	-8.567	.000
	Sex	-.030	.574	-.002	-.052	.958
	Age	.035	.050	.037	.693	.489
	ReligiousO <sup>30</sup>	-.033	.317	-.006	-.105	.916
	ReligiousIn <sup>31</sup>	.387	.157	.076	2.467	.014
	0-5	.172	1.109	.007	.155	.876
	6-15	-.223	.759	-.013	-.295	.768
	26-35	.233	.791	.011	.295	.768
	36-45	-3.327	3.481	-.028	-.956	.340
	Faith	-.448	.362	-.073	-1.237	.216
	Exposure	.098	.016	.211	5.967	.000
	Impact	-.041	.010	-.144	-4.088	.000
	Psyconsult <sup>32</sup>	2.163	.764	.089	2.831	.005
	Debrief	.314	1.031	.009	.305	.761
	MHC	1.400	.945	.045	1.482	.139
	Equivalent Rank	.005	.265	.001	.020	.984
	Injuries	-.718	.216	-.113	-3.328	.001

<sup>30</sup> Religious Orientation

<sup>31</sup> Religious Influence

<sup>32</sup> Psychological Consultation

Table 7-33: Simple Regression Analysis of predictor variables on resilience scale

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adj. R Square</i>	<i>SE</i>
1	.708 <sup>a</sup>	.501	.484	5.864

Table 7-34: Simple Regression Analysis of predictor variables on resilience scale:  
ANOVA

<i>Model</i>		<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>Sig.</i>
1	Regression	20458.329	20	1022.916	29.752	.000 <sup>a</sup>
	Residual	20353.779	592	34.381		
	Total	40812.108	612			

This model was able to predict a 49% variance in the scores of resilience in the present sample (table 7-28). The analysis revealed that significant predictors which were subjected to further analysis (see the step wise method).

### 7.23 Stepwise Method: Identification of powerful predictors of resilience

The stepwise method was used to identify the subset of independent variables which had the strongest relationship with the dependent variable.

Significant variables (in order of prediction power) are shown below:

Table 7-35: Simple Regression Analysis of predictor variables on resilience scale:  
ANOVA

<i>Predictors</i>	<i>Beta</i>	<i>p</i>
Mental Health	-6.564	.000
Internal Resources	5.019	.000
Nationality	-8.567	.000
Religious Influence	2.467	.014
Trauma Exposure	5.967	.000
Trauma Impact	-4.088	.000
History	2.831	.005
Injuries	-3.328	.001

The analysis showed a significant model ( $F_{5, 363}=91.81, p < 0.001$ ) with an adjusted R square = .55. This model explained 55% of variance in the resilience scores.

## 7.24 Hierarchical Multiple Regression Modelling

The variables were entered in the following sequence:

1. Demographic Variables: Model 1
2. Trauma related variables: Trauma exposure, trauma impact, health status: Model 2
3. Main variable: Internal and External Coping: Model 3

Table 7-36: Hierarchical Multiple Regression Modelling (Part A)

<i>Model</i>	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
1 (Constant)	41.985	3.716		11.298	.000
Nationality	-11.373	.955	-.697	-11.908	.000
Sex	.280	.609	.016	.460	.646
Psyconsult	3.226	.822	.132	3.926	S.000
Debrief	.015	1.125	.000	.013	.990
MHC	1.501	1.022	.048	1.469	.142
0-5	.109	.884	.004	.124	.902
6-15	-.260	.642	-.015	-.405	.685
26-35	.865	.771	.041	1.121	.263
36-45	-4.244	3.741	-.036	-1.134	.257
ReligiousO	.082	.320	.014	.256	.798
ReligiousIn	.534	.169	.105	3.154	.002
Equivalent Rank	.120	.289	.014	.415	.678
Injuries	-.633	.233	-.099	-2.721	.007
2 (Constant)	51.489	3.677		14.002	.000
Nationality	-11.491	.931	-.704	-12.338	.000
Sex	-.053	.580	-.003	-.092	.927
psyconsult	2.077	.777	.085	2.673	.008
Debrief	.210	1.049	.006	.200	.842
MHC	1.901	.957	.061	1.987	.047
0-5	-.382	.826	-.015	-.463	.644
6-15	-.619	.600	-.037	-1.033	.302
26-35	.487	.727	.023	.669	.503
36-45	-4.333	3.487	-.037	-1.243	.214
ReligiousO	-.012	.301	-.002	-.039	.969
ReligiousIn	.402	.158	.079	2.538	.011
Equivalent Rank	.080	.269	.009	.298	.766
Injuries	-.583	.218	-.092	-2.672	.008
PSYHEALTH	-.306	.044	-.214	-6.972	.000
Exposure	.108	.017	.233	6.539	.000
Impact	-.045	.010	-.157	-4.383	.000
3 (Constant)	42.891	4.141		10.358	.000
Nationality	-9.144	1.046	-.560	-8.743	.000
Sex	-.119	.570	-.007	-.209	.834
psyconsult	2.154	.763	.088	2.823	.005
Debrief	.347	1.030	.010	.337	.736
MHC	1.400	.944	.045	1.483	.139
0-5	-.312	.814	-.012	-.384	.701
6-15	-.549	.591	-.032	-.930	.353
26-35	.520	.714	.025	.728	.467
36-45	-3.049	3.435	-.026	-.887	.375
ReligiousO	-.182	.297	-.031	-.612	.541

ReligiousIn	.397	.157	.078	2.537	.011
Equivalent Rank	.002	.265	.000	.006	.995
Injuries	-.722	.216	-.113	-3.347	.001
PSYHEALTH	-.291	.045	-.203	-6.520	.000
Exposure	.099	.016	.213	6.039	.000
Impact	-.041	.010	-.144	-4.083	.000
Internal	.295	.060	.227	4.898	.000
External	.007	.070	.003	.095	.924

Table 7-37: Hierarchical Multiple Regression Modelling (Part B)

<i>Model</i>		<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>Sig.</i>
1	Regression	16188.531	13	1245.272	30.293	.000 <sup>a</sup>
	Residual	24623.576	599	41.108		
	Total	40812.108	612			
2	Regression	19532.975	16	1220.811	34.193	.000 <sup>b</sup>
	Residual	21279.133	596	35.703		
	Total	40812.108	612			
3	Regression	20393.308	18	1132.962	32.959	.000 <sup>c</sup>
	Residual	20418.800	594	34.375		
	Total	40812.108	612			

After controlling for demographic variables, and trauma related variables, the third model was statistically significant ( $F_{18, 594} = 32.959, p < 0.001$ ) with an adjusted R square = .49.  $\Delta R$  value was .02. This shows that both internal and external coping contributes to a 0.2% variance in resilience after controlling for other variables. The beta values<sup>33</sup>, however revealed that only internal coping [ $F(1, 564) = 3.959, p = .02, \eta^2 = .01$ ] was a strong predictor towards resilience.

<sup>33</sup> The Standardized Beta Coefficients give a measure of the contribution of each variable to the model. A large value indicates that a unit change in this predictor variable has a large effect on the criterion variable. The t and Sig (p) values give a rough indication of the impact of each predictor variable – a big absolute t value and small p value suggests that a predictor variable is having a large impact on the criterion variable.

## 7.25 Path Analysis

*(Exploring the mediating role of coping approaches and trauma exposure: Using Baron and Kenny Method)*

The regression analysis in previous sections revealed that internal coping was the strongest predictor towards resilience; however it appeared to alter the influence of trauma exposure (another independent variable). Path analysis is a statistical procedure to determine the nature of the relationship in the model. Path analysis was used to verify the direction of association between certain variables and to explore the mediating role of coping approaches and trauma exposure. The figure below explains the amount of variance caused by each variable keeping others constant.

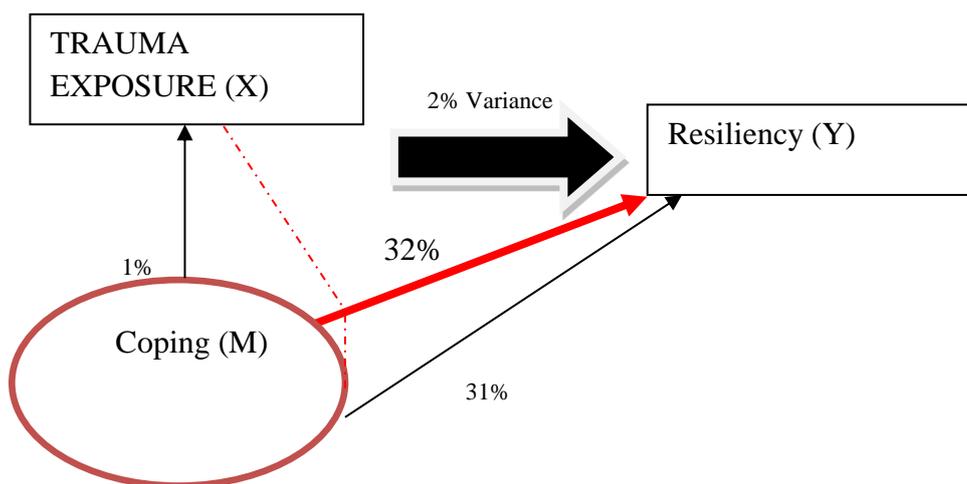


Figure 7-13: Mediating effect of coping on resilience

The diagram represents the percentage of variance (as indicated by  $\Delta R$  value) caused in a predictor variable. Keeping all other variables constant, Coping approaches (Internal and external) contributed 31% variance to the total scores of resilience ( $\Delta R = .306$ ). Similarly, low scores on the trauma exposure subscale alone predicted 02% variance in resilience ( $t = -3.323$ ,  $p = .001$ ,  $\Delta R = .016$ ).

The method of assessing mediating roles was adapted from the steps mentioned by Baron and Kenny (1989) in which they suggest conducting analysis at multiple levels.

Considering the following diagram, X denotes main independent variable and Y denotes

main outcome variable. Whilst the mediational factor in this study is coping approaches, since the main aim is to identify coping approaches which are healthy contributors towards resilience.



Here X = Exposure

M = coping strategies

Y = Resilience

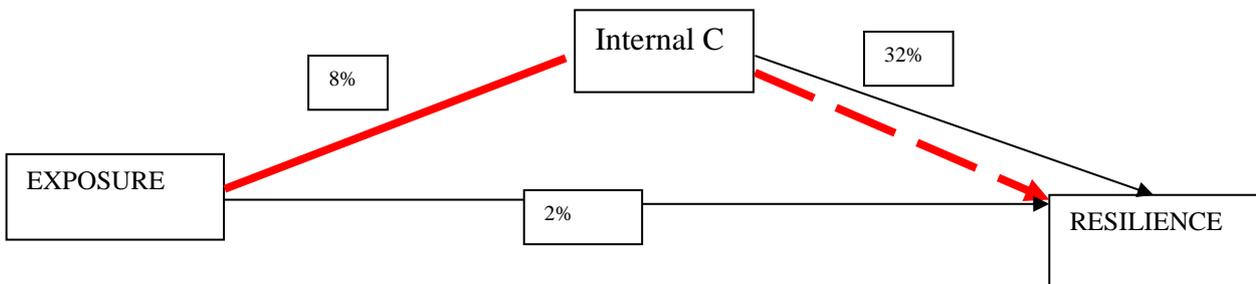


Figure 7-14: Mediating effect of coping on resilience

It was interesting to note that the statistical significance of the exposure variable on predicting resiliency ( $\beta = -.133, t = -3.323, p = .001$ ) was neutralized by adding a coping approaches scales variable to the model ( $\beta = .764, t = 11.98, p = .445$ ).

Coping strategies appeared to mediate the relationship between exposure to events and resiliency, by neutralising the influence of exposure. Adjusted R values showed that exposure significantly contributed towards resilience, controlling for internal and external coping strategies. However, the impact of exposure was neutralised when the internal coping strategy was added to the model. This could explain the mediating role of coping strategy.

## 7.26 Summary of major findings

The chapter provided statistical analysis of association between main variables to examine the research questions. The findings suggested that majority of the British police officers were comparatively more resilient, and had better mental health (although not significantly different) than Pakistani Police Personnel. Trauma Exposure and Trauma Impact was marginally greater in Pakistani Police officers as compared to the British police officers. Statistics also showed that use of thoughts/emotion-focused coping and seeking support was more common in the British police officers than amongst Pakistani personnel.

Pakistani personnel used more support-dependent strategies as compared to targeting emotions by themselves. Better Mental Health, Use of Internal Coping resources, being younger, fewer years of service, less exposure and less psychological impact were associated with better resiliency. The results identified factors such as Mental Health, Internal Resources, Nationality, Religious Influence, Trauma Exposure, Impact, history of psychological consultation and physical injuries predicted scores on resiliency. Amongst all variables, internal coping was the strongest predictor towards resilience. Lastly, the results showed that Internal coping strategies appeared to show mediational effect by neutralising the role of exposure in influencing resilience.

## 8 QUALITATIVE FINDINGS

### 8.1 Introduction

In the previous chapter, the cross-cultural features such as type of trauma, frequency and impact of trauma encounters appeared to influence the resiliency and mental health of those involved in sensitive/traumatic work. It appeared that the mental health/wellbeing, utilising appropriate coping resources, help seeking attitude, history of physical illness and service duration were significantly associated with one's resiliency. In order to extend the knowledge about trauma and its correlates, this chapter presents qualitative analysis of subjective questions included in the main scale survey (see Appendix H) to assess the dimensionality of trauma in local contexts and individual differences in the police's psychological world.

The chapter provides an understanding of the diversity in trauma experiences and coping resources in multicultural context. This chapter builds upon the real life experiences of these police officers i.e., exploring how they understand and evaluate their subjective experience and develop coping strategies (or utilise existing resources) to keep going in the midst of trauma exposure in the police work. The qualitative analysis of open ended items from the main survey was carried out by analysing the codes and themes constructed by a thematic analysis approach (see methodology section for its detail).

The exploration was extended to investigate the risk and vulnerability towards psychological harm in work related upsetting exposures c) risks and challenges involved in psychological recovery: revealing strengths and coping strategies. This chapter concludes by summarizing the journey into the police's complex psychological world. This chapter is built upon qualitative information exclusively and it tends to provide original contribution of meaning and understanding of coping and recovering.

#### *Psychological World of the Police*

The police work exposes its workers towards a greater risk of being upset, agile or emotionally triggered by situations, which are perhaps traumatic or sensitive. Thus they need to be mentally prepared (or expected to be) for the trauma related exposures, potential emotional and behavioural reactions/responses and how to cope. This preparedness or mental preparation, however, is the only immunity against psychological harm in the

workplace. In order to understand further, the challenges involved in coping from traumatic situations, it is essential to gain an understanding of both the mind-set of these officers (how they perceive), the sensitivity of the task considered as traumatic or upsetting, and the exhibition of emotions and responses.

This chapter is a follow up on the previous chapter i.e., statistical analysis. It discusses a wide range of themes emerging from both qualitative and quantitative analysis in the main survey. The following themes were extracted from coding of subjective questions:

## 8.2 What makes an event “traumatic”?

The first question explored in the narrative responses was regarding experiences which had strong emotional significance to the responder. The responses showed various aspects of experiences suggesting that trauma is multifaceted and depends on several factors before it can be categorized.

Some of the common themes related to various emotive aspects of traumatic experiences are listed below:

### *Emotionality*

The definition of traumatic experiences varied in terms of describing how they had felt afterwards. For example, for some, the event was traumatic because it was “emotive”, involved children of a young age, dead and badly mutilated bodies. Some of the emotive aspects of the traumatic event are described as follows:

### *The state of body/scene*

The incident can be upsetting if the content under investigation is distressful or fragile. For example, it can include collecting samples of evidences during an initial investigation such as human organ wastes, dismembered body parts, blood or residue of the accident or a blast. Dealing with these can be considered as traumatic.

*“Seeing the lifeless body and seeing the relatives grieving”*

### *Sight and smell*

According to several police officers, the sight and smell of the incident they have been involved in, was highly disgusting or annoying and acted as a strong reminder of that peculiar incident. The sight or smell can remind them of some sort of failure (for example being unable to save life/rescue) and can have a long term implication for the individual experiencing it.

*“Seeing something so surreal, seeing the disrespect paid to two people, needing to concentrate and secure the scene correctly and brief senior officers, suspecting gang culture and going home alone”.*

(British, 39 yrs.)

### *Injuries sustained*

Another significant theme was related to the physical injuries sustained coupled with organisational attitude after critical incident. For example:

*Having been injured, I felt I may be left where I fell due to the ferocity of the missiles. Training says you'll be picked up and taken back to safety but I wasn't. I had to manage to move or I felt I'd be left.*

The response suggests that post event care is equally important and organisations need to review their post trauma care process to facilitate its officers after participating in similar incidents.

### *Witnessing Injuries*

For several police officers, witnessing someone who is severely injured is a great psychological stress. To provide care for the injured needs strong emotional courage which was put to test when handling injured or the dead. The following responses from the British police officers illustrate this aspect:

*“The sight of the deceased injuries caused by the fire, and the trauma it had caused the daughter who had found her”*

*“The state of her body and its position, I also found that when I went into the kitchen where her body was discovered I saw her fingernails in the wall where she had tried to escape through the kitchen window and he had dragged her down and she had pulled all the curtains down with her, also the injuries to her face and neck also haunted me.”*

### *Location*

For both personnel, the events occurring in the public domain or religious places were traumatic because it caused widespread distress to the whole community.

*“The whole scene was unpleasant to see. I have seen many bodies in various states but this was very much in the public domain - city centre and disagreements between police and attending ambulance crew regards retrieval of the head of the victim.”*

*“It was my first murder and it was a police officer. I was asked to keep a number of things discovered during the post-mortem as confidential and not to speak with anyone about it. Distressing injuries.”*

### *Nature of task in hand*

As indicated in earlier responses, the nature of task was an important indicator of getting stress or anxiety.

*“Removing victims’ throat and brain, taking samples and removing rounds from the head”.*

### *The painful reflections*

Some of the officers reflected on the details that were painful in following way:

*“At times, it was the thinking or interpretation of life after witnessing events, which was stressful”*

*“The body was in an early state of decomposition and did not cause me any distress, nor did the grieving family as I have always been good at dealing with both aspects of this type of incident. I have also dealt with the bodies of people who died of similar ailments. The distressing aspect was that the man appeared to have everything to live for. He owned a large house, drove an expensive car, had a well-paid job as a global consultant, three children who were all at university, no debt or job worries (according to wife) and took holidays in exclusive destinations. He had a life that most would envy and a family that wanted to support him, yet he chose to die in horrible circumstances. I am described by most as an emotionally flat person. I do not get upset by things that affect most other people. I have dealt with far more horrific scenes and more stressful situations but could not and still cannot reconcile this issue in my own mind.”*

*“It was not so much the death of the woman herself that I found unpleasant, having dealt with many deaths prior to this one, but it was when I called at the family home to inform her husband of his wife's death and in the house were the couple's children`s coats and school bags hung up ready for school the following morning. The children, whose ages were I believe 12, 7 and 5yrs, were all in bed ready for their first day back at school after the summer holiday, totally unaware of their mother's death”.*

For several participants, the state of body/scene under investigation was highly emotive. Many detailed the difficult memories of crime scene and body parts, which after investigation, proved challenging to be dealt with.

One of the factors least emphasised was whether the trauma concept was recognised amongst participants or not. The following story by a serving British police officer suggests a theory about genesis of traumatic stress.

*“When traumatic stress was first mentioned I refused to agree...I challenged it...I explained to the Neurologist that I'd never had a bad dream..I enjoyed my job...In fact...I'd do anything to be allowed back on the streets. His reply was:*

*“If you hadn't said that..I wouldn't be so sure” At the time that confused me.. I then noticed behaviour pattern's around confrontation. Or seeing other people suffer....maybe behaviour pattern is wrong...I'd start to shake more(not a nervous shake), a feeling of confusion, pains across the body, my vision effected.*

(British, 48)

*“Even with all this...I'd do it all again”.*

(British, 49)

*“I'm only explaining this because people (including me 6 months ago) think traumatic stress causes the person to fear what caused it, avoidance. I now think I started to chase it.”*

(British, 36)

It suggests that the over thinking about trauma event might stimulate the person to consider the event in detail which may increase the chances of getting overwhelmed with the disorder rather than its actual existence in the reality. This is indeed a possibility, whether increased awareness might alert and cause the disorder to take place eventually rather than just avoiding or ignoring it? In the above cited quote, the respondent initially denied the diagnosis made by an expert by considering facts that the apparent performance and satisfaction was quite intact. When probed later, the respondent shared having sustained accidental injuries and followed by severe somatic complaints such as chest pain, anxiety and choking. The denial is a natural defence mechanism for many, because it may

reduce the level of anxiety and help them to concentrate on the task in hand knowing the job demands and work pressure (the limited time).

Although a majority of respondents shared their diagnosis, not many were of the view that they were suffering from a “disorder” in particular because it was considered as a cost of the work they have chosen, and most had accepted that they had to live with it. A concept called Realism.

### *Realism*

Realism means accepting the reality and helplessness. In police work, the attribute of accepting the aftermath of trauma is very much personified i.e., it has the police cultural component. It can be argued that since there is no help or hope available, the acceptance of reality acts as a best strategy.

There could be different perspectives to how and why a particular incident or stimuli gets emotional value. As the quote suggests, the understanding of what caused the stress is an interesting area to look at. In the current study, a majority of police officers showed reluctance regarding acknowledging having any such “symptoms”. The reluctance was stronger in Pakistani police officers. This reluctance in “appraising” the delicate emotional issues or problems is partially explained by their work role. A police officer, for example, has a strong egoistic personality (the police personality) which undermines (and more often alters) the consideration of psychological problems. One of the concerns raised in the open ended descriptions was the genesis of PTSD in policing i.e., it is not the avoidance that can cause these symptoms of stress to proceed to PTSD, rather it is the detailed conscious attention given to the stress symptoms creating panic or anxiety. This perspective is explored in this chapter along with other themes. Trauma was defined as any incident or experience, which affected physically as well as psychologically to a level that it could have disturbed personal and professional life. This chapter highlights the difference of approaches in trauma experiences and coping in the two countries. The motive is to help in understanding what processes are involved in trauma coping and management.

### 8.3 The emotional side of the traumatic reaction

The reflections of police officers narration of traumatic stories, strongly suggested a wide range of emotional reactions upon witnessing or dealing with the traumatic content. The spectrum of these emotions is described in the following table:

Table 8-1: Explaining psychological outcomes to trauma experience behaviour

Risk Factors (Causes)	Psycho-Socio-Biological Manifestations	Outcome
Nature of Critical Event	Intense Emotional Reaction	Stress
Marital Conflicts	Poor Sleep	
Excessive Work Demands	Constant thoughts about work	Clinical Depression
Performance Culture	Shallow breathing	Sick Leave
	Restlessness	Subject to disciplinary inquiry
	Confrontational Behaviour	Anger
Having to work during psychological/physical treatment	Intrusive thoughts	PTSD (Post Traumatic Stress Disorder)
	Extreme fatigue	
Physical Ailment	Loss of Concentration	
Exposure to number of incidents in short period of time leaving no time for management	Muscular Twitching	
Lack of Sympathy and Support from Managers	Submissive Behaviour	
Personal Conflicts	Loss of Self Belief	
Anger	Feelings of being abandoned or ignored	
Bullying in work place	Chest Pains	
Financial Reasons	Panic attacks	
Relationship Issues		
Lack of channelisation of feelings		
Death of Children and Association factor		
Attitudinal problems with manager		
Fear of being contaminated with disease during investigation		
Management issues: being responsible at high position		
Shift Issues		
Sexual assault or harassment at workplace		
Fear of death		

#### *Fear of death*

The most common emotional experience reflected in the responses was “fear of death” or getting serious injuries while investigating. The responses from police forces of both countries reflected that near death experiences coupled with lack of support from colleagues or staffs was quite a strong predictor towards psychological distress and anxiety in general. Some of the responses indicated Organisational fallacies responsible for

additional causes of distress. The following are some of the responses explaining this aspect:

*“Real Danger of being shot... Fear of death/serious injury”*

(British, Age 53)

In addition, several other factors appear to exaggerate or trigger the situation. For example:

*“Genuine fear of death... Initial Police response was poor in terms of numbers and support, one of first serials deployed at the beginning of the incident at which point several injuries were sustained to colleagues around, from a team of one Inspector, 3 Sergeants, (I being one of them at the time), 3 drivers and 18 Police Constables. There remained only myself, two sergeants and one Police Constable, all the others were injured, initially "lost", abstracted without notification, redeployed etc. leaving us feeling abandoned. Hail of rocks / missiles on Westgate, could even hear myself-think or communicate for sheer non ceasing noise. White transit van at traffic lights with public in same, woman on nearside, young child in middle seat and man driving, windscreen of same went through shattering occupants with glass, occupants, particularly woman & child hysterical, screaming for my help only feet away, unable to move or help in any way due to bombardment, pinned in and felt so helpless and that collectively we would all be killed, who would come and rescue the Police?”*

(British, Age 53)

This further explains that even if the fear itself is a natural response to a life threatening situation, lack of support and encouragement, situational factors such as those appearing at/or before the investigation, can distort the ability to deal with stressors, and can affect emotional responses considerably.

In the same way, the Pakistani police personnel responded expressing the same fear of death and lack of apathy from government, supervisors and even the community. The foremost fear of death can be seen in context of the political unrest in the country and mounting pressure on police. Some of the responses from Pakistani police officers regarding fear of death are as follows:

*Feelings of helplessness*

For some, the inability to save the person dying was traumatic. It induced feelings of helplessness and guilt for not saving the life, provided it could have been prevented.

### *Feelings of Inadequacy and worthlessness*

Some of the personnel showed resentment towards the lack of support by fellow colleagues, and eventually they felt they had been let down and taken for granted.

### *Constant Worry*

Coordinating with different groups was one of the most challenging aspects while there was delay in service provision. The constant worry and threat of self-danger was prominent in many responses.

### *Distress*

Several incidents were deemed distressing by their visual seeing, smelling etc. The memories returned in the form of flash backs.

### *Adrenaline affects (the concentration)*

An expected and most common somatic feeling was that of adrenaline effects i.e., feeling nauseous, disgusted, and panic or shock, sweating etc.

*“Seeing something so surreal, seeing the disrespect paid to two people, needing to concentrate and secure the scene correctly and brief senior officers, suspecting gang culture and going home alone.”*

*“She was the same age as me, and had a fearful expression on her face. Felt it was such a waste of a life. Felt a bit faint and found it difficult to concentrate on the job I had to do, was worried that I wouldn't do my work properly...but I did”*

### *Confusion*

Responses suggested that while trying to save the lives during an incident, it was a state of confusion and chaos which was most overwhelming. Some officers described their confusion as:

1. Overwhelming state
2. Emotionally draining
3. Heart-breaking
4. Difficulty in concentration
5. Emotional stress
6. “Very emotive”

As it can be seen, most of these experiences are natural and wither away with time. Yet, few of these personnel may experience a rather severe spectrum of symptoms such as repeated flashbacks or panic attacks, which might ultimately lead to development of Post Trauma Stress or PTSD. The most common theme appearing in written narratives of both countries forces was “fear”. This could be fear of one’s own safety, or fear of death, fear of being contaminated and fear can convert into a form of panic

#### 8.4 Emotional Reactions and Police Response on Crime Sites

These themes suggest strongly that the initial police response, which is expected to be vigilant and well-coordinated, is not well executed not because of the acute emotional reaction (such as panic or fear), but the underlying factors such as on the spot shortage of equipment, staff and communication barriers. These factors not only lead to feeling insecure within the police service, but can also affect the onsite response. This idea can be conceptualized as follows:

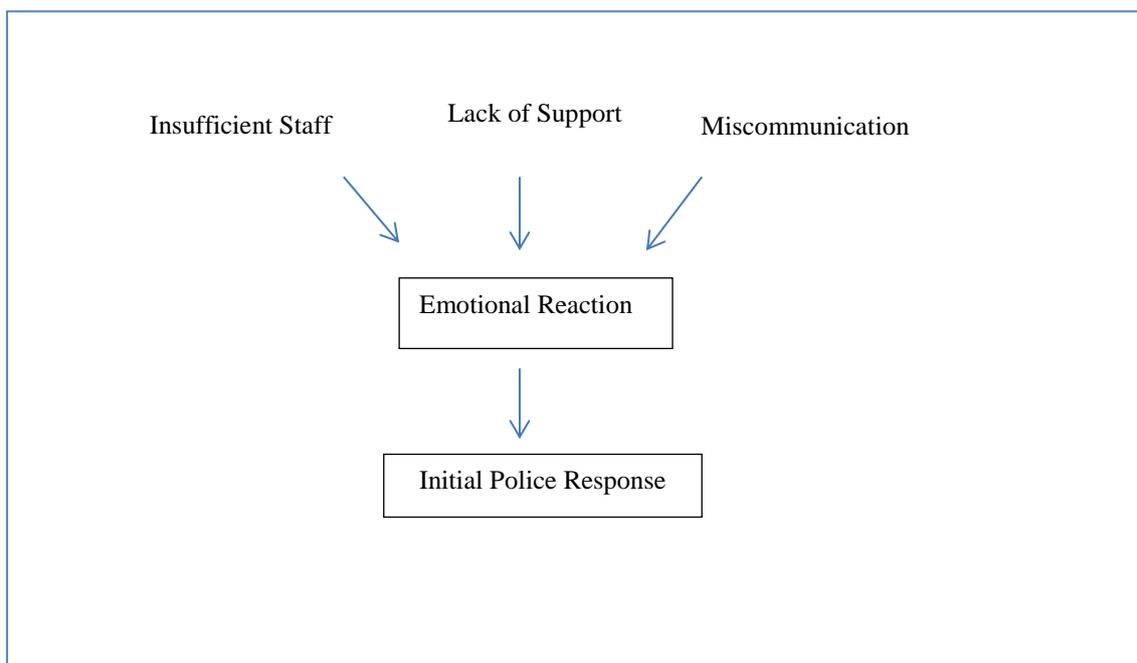


Figure 8-1: Factors influencing initial police response

## 8.5 Predictors of Psychological Damage

The following factors were suggested to predict psychological damage. These codes were extracted on the basis of thematic coding.

1. Colleague, Close Friend
2. Dealing with sensitive information or victimised
3. Unhealthy workplace relationships
4. Dissatisfaction with life
5. Degree of humiliation
6. Emotive aspects
7. Relatedness
8. Proximity or Closure
9. Spread of incident

The first exploratory question explored the trauma provoking factors or elements. The following themes were generated explaining what caused them the feelings of trauma.

“Unpleasant” was used for both events as well as the meanings inferred/given from/to it.

*“You don't deem it unpleasant as you have to shrug it off and carry on with your job. The realism of it causes you to carry on but it's the knowledge of how you would've considered it before the police that helps me state that it was an unpleasant incident”.*

For all three of the above incidents, it was not dealing with the scene that was unpleasant, it was thinking about it afterwards. Moreover, the availability of time to dwell on self-critique and reflection over the incident can have significant effect on enhancing the emotionality of the traumatic event.

It might be that the existence of emotional aspects of such work cannot be negated, their management may reflect whether they were considered unpleasant or not. Feeling of numbness may be explained by either a lack of contemplation, or being accustomed to.

*“I have attended incidents that I felt I should have found unpleasant but didn't. I even sat in hospital watching a child die but didn't feel anything. I think I have just become accustomed to this sort of thing and it is now routine.”*

*“I found none of this incident unpleasant as I had to complete my duties as a supervisor this did not allow me any time to contemplate what it was I was actually looking at.”*

The majority of the trauma stories were detailed descriptions of all associated images, voices, verbatim, or the feelings. These trauma stories reflected their appraisal and showed a degree of the psychological impact. Some of the responses from female British police officers are as follows:

*“The state of her body and its position, I also found that when I went into the kitchen where her body was discovered, I saw her fingernails in the wall where she had tried to escape through the kitchen window and he had dragged her down and she had pulled all the curtains down with her, also the injuries to her face and neck also haunted me.”*

(British Female, 36 yrs.)

*“The family dog had eaten its owner's head off, and had been entering the body through the neck and dragging out the insides. There was half a skull in the hall way as I entered the premises, bits of heart, etc. strewn over the house. Caged birds were under nourished; the scene was an untidy and dirty house. The pair were mother and daughter alcoholics”.*

(British Female, 49yrs.)

*“Dealing with the witnesses and police colleagues afterwards as a supervisor...trying to remain strong and focused”*

(British Female, 47yrs.)

*“Observing the dead baby was particularly heart-breaking as was seeing the physical effect the death had on the family. I found this very different to dealing with the death of an adult. Very emotionally draining and something that has stayed with me throughout my service especially since becoming a mother myself”*

(British Female, 33yrs.)

These responses represent a unique aspect of policing as a female. Female officers wrote with a distinct expression of delicacy, intricacy and detailing about their response towards trauma and how it had affected them. The female responses were limited. One of the responses, however, reflected a cultural context:

*“Its basically the attitude towards women, especially by male colleagues, I am unhappy with it and will prefer to quit the job after marriage. There is no respect of juniors while senior women police officers manipulate their powers.”*

Some of the other female police indicated transport facilities as a big problem. Another issue was the sexual harassment at the workplace. Responses of male police personnel were slightly different in that many of them reported psychological symptoms and disturbance in particular:

*“The locus resembled a bomb scene with five seriously injured persons laying about the locus.*

*Loss of blood requirement of surgery which lead to 70 stitches and permanent scarring. Psychological issues post-traumatic stress disorder, night terrors and flashbacks.”*

(British Male, 38 yrs.)

The responses from Pakistani police men/women, though limited, but were not different in terms of the scale of distress involved. For example:

*“The school children were off to their homes in their school bus when it was about to cross the bridge (phatak). The bus driver showed negligence and attempted to cross the train line without looking for the train. As a result, while they were on the track, the train crushed the school bus. Several innocent children were killed or injured. This incident is highly disturbing to me.”*

(Pakistani Male, 38yrs.)

Confronting the distress and after affects must be challenging. The nature of detail in these responses also reflects an element of sensitivity and nature of trauma involved. Exposure to these types of incidents sometimes compromises the psychological integrity of the individual involved such that the person may or may not be psychologically/emotionally involved afterwards.

As stated by one of the personnel:

*“Witnessing murdered bodies is very traumatic. In particular child deaths / murders as I have children myself. Also when you leave work those images are still present in your head and cannot be erased.”*

(Pakistani Male, 33yrs.)

The sensitivity of such events and how it might affect the psychological robustness, is discussed next.

#### 8.6 What are the components of trauma? Cross National Differences

Here, the fragmentation refers to the detailed analysis and separation of components of a trauma event. As mentioned earlier, journeying through difficult life experiences gets disquieting and challenging specially in the police world. More often it results into constant worry and stress and it affects job performance. Henry Vincent (Henry, 2004) has used the term survival psychology which emphasises the phenomenon of survival, since in Police work, the escape from trauma experience is not possible. Psychologists looking at the impact of working in similar situations have detailed the factors such as Organisational structure/ support, personal factors, personality or on-going conflicts as a major contributor towards stress. The trauma, whether it can be overwhelming, or minute/transient depends upon several factors such as the way it was perceived, individual's past experience, personality traits and the presence of resources to back-up (such as mentors).

A cluster of events considered traumatic is listed below; the lists segregate the experiences of Pakistani and British police officers.

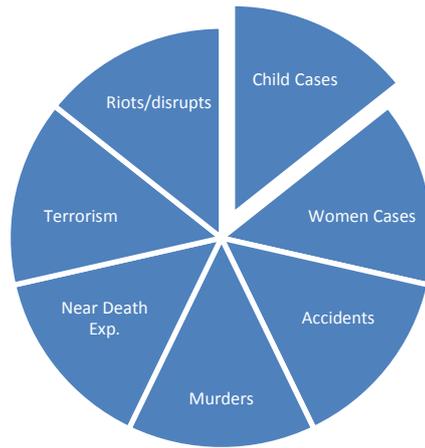


Figure 8-2: Types of trauma experiences

### 8.7 Why do you think this event was traumatic for you?



Figure 8-3: Nature of trauma

These two figures suggest elements of trauma. These are the aggregated responses generated after coding. Looking at the responses from Pakistani Police, it appeared that they were most affected by witnessing/investigating cases involving young children, or females. Most of the cases including women involve rape or had an honour element.

This was a particular finding suggesting the mind-set of how these cases are considered and dealt with. Not only that they can cause distress, a tabooing state can also affect the way an investigation of such cases will be done. For that reason most of the female violence cases remain unregistered (due to police brutality and mind-set). A woman's abuse case is considered as a matter of honour, police tend to resolve the issue by taking bribes and letting the family solve the issue by themselves. Their own attitude towards these cases is quite cynical.

Analysing the type of work these officers are involved in gives enhanced understanding about sensitivity and vulnerability for the psychological crisis they are exposed to. The first research question related to investigating types of trauma experiences and aimed at determining nature of sensitivity attached with it. Figures 8:2-3 specify some of the type of experiences and their nature. This section summarises the subjective responses on the survey question requesting information about real police life experience that was particularly memorable. The respondents were also requested to identify why they mentioned that particular event and how it affected them.

#### 8.8 Psychological aspects of trauma experience

*“The body was in an early state of decomposition and did not cause me any distress, nor did the grieving family as I have always been good at dealing with both aspects of this type of incident. I have also dealt with the bodies of people who died of similar ailments. The distressing aspect was that the man appeared to have everything to live for. He owned a large house, drove an expensive car, had a well-paid job as a global consultant, three children who were all at university, no debt or job worries (according to wife) and took holidays in exclusive destinations. He had a life that most would envy and a family that wanted to support him, yet he chose to die in horrible circumstances. I am described by most as an emotionally flat person. I do not get upset by things that affect most other people. I have dealt with far more horrific scenes and more stressful situations but could not and still cannot reconcile this issue in my own mind”*

This is a fair example of those officers who think they are emotionally capable of undertaking any trauma or stress. Even though the confidence in self helps, the reality that anybody can get affected by some aspect of his or her involvement in case still stands.

## 8.9 Nature of trauma: Looking at aspects

Looking at the reasons why an event becomes traumatic revealed several themes such as: association with real life people, threat to personal safety, near death experience, mismanagement at/after crime scene, flashbacks, use of weapon to control mob and the victims' families etc. These themes are described in detail as follows:

### *“Association effect”*

Some of the responses showed the association affect i.e., the respondents appeared to relate their experience with everyday life. For example:

*“The CCTV had to be viewed in order to identify the victim. The CCTV showed the victim being shot with a crossbow, the victim was well known to me as my team had worked with her for over 4 years.”*

Quite interestingly, the incident can become traumatic after a period. For example:

*“As not particularly distressing at the time but the memory has become more so over time as I now have children of a similar age and can imagine them in the same position”.*

For many personnel, the incidents reminded them of their loved one and this sort of reminder was distressing in particular. This suggests that the memory of unpleasant events and flashbacks can act as a stressor and a potential risk factor for developing psychological problems.

This aspect was equally acknowledged by Pakistani police men/women, where seeing children's bodies and female rape victim's bodies was rated as highly distressful and unpleasant.

### *Sight and smell*

The sight and smell of the incident was mentioned as a strong indicator.

*“It was unpleasant to see their living conditions but also there was a lot of crying, screaming and distress on all parts. It was quite distressing to watch”*

### *Witnessing deaths*

For some, to attend someone who is dying is a great set back. It gave them feelings of helplessness and worthlessness. This was because they felt they were unable to save lives.

*“I witnessed a man die in front of me.”*

*“He was alive when I attended and whilst waiting for the ambulance”.*

*“Unjustified accountability and lack of managerial support”*

*“The riot was a very intense though relatively short period of high stress. Little information given to officers who really did not know what was going on. Confronted by a large mob throwing petrol bombs, stones, hitting golf balls and driving stolen cars at officers and setting fire and rolling cars towards us which then exploded. Some months later we were without explanation/warning shown video footage of the incident. The constant thunder of stones against riot shields on the video vividly brought back memories of the night. Severely mangled bodies at accident scenes are a regular occurrence for officers. Never pleasant and it does not get easier with experience.”*

This theme appeared quite strongly from the responses of both Pakistani and British police. Handling a mob is a pressurizing task and most often, mismanagement of such events delimits a police response during the crime scene as it is expected or required. The police are ultimately to blame no matter what the reasons are for a lack of response as it is the managerial/organisational responsibility. However, as evidenced above, the accountability for the job that they were supposed to do leaves them with greater confusion and dissatisfaction. A possible risk factor!

### *Secondary trauma*

*“The impact on me was for two reasons. Firstly my work partner that night had recently lost his 20 years old son to meningitis. He couldn't deal with the accident scene - which I fully understood. He had to work on the outer perimeter. I felt for him as it stirred up difficult memories which were still only about a year old by then. Secondly - the girl's parents were in London for a weekend away. I couldn't help but visualise their grief and the fact that Police Officers from London had to tell them what happened and were driving them home up the motorway to Yorkshire. What can you say to them on a journey like that?”*

Another aspect of psychological vulnerability is being exposed to vicarious trauma i.e., indirect effects of trauma. As evidenced above, helping others to overcome their grief can itself be a distressing experience. This theme did not appear in the Pakistani responses.

### *Dealing with families*

One of the most genuine aspects of trauma experience was dealing with families, reporting the death of their loved one, or explaining the causes of death. For example:

*“Unpleasant because I had to deal with many grieving family members. An older sibling found his brother. Dad hanged himself and this was also discovered by the older sibling [truncated]. Probably by spending more time with the family it became more personal whereas other homicides and deaths I have worked on have been relatively quick and not a prolonged focus on such support and having to explain the findings repeatedly. “*

This highlights an important aspect when dealing with families i.e., becoming personally attached. This finding supplements earlier pre-study analysis with reflected elements of emotional involvement with families. This type of experience was equally highlighted in the Pakistani responses

### *Fear of contamination, disease or death*

In some of the responses, the personnel showed disquietedness over dealing in an infectious environment.

*“I have struggled with a miscarriage at work. I have also struggled due to a child who was being sexually assaulted which brought back flashbacks of my past and I got too emotional and had a mini breakdown.”*

*“The fear that I may have contracted HIV or Hepatitis and all the stress that came with that. It also had a huge impact on my personal life and has affected my relationship with my partner.”*

*“The house was littered with human faeces, the kitchen floor was used as a lavatory; a bucket in the bedroom and an overflowing toilet. This was extremely unpleasant and I was required to protect myself (bagging feet/hands etc.), despite the fact that we are not routinely provided with clothing protectors. This type of job is not unusual.”*

These responses reflect that there is a constant risk of being exposed to infections and diseases but more importantly it influences the personal relationships which are a greater source of psychological support in ordinary circumstances.

This theme did not correlate with the Pakistani responses. No one mentioned such a risk, while contrary to this, the risk of such exposure is quite high and undetected and unrecognised.

### *Unsuccessful efforts and helplessness*

On several occasions, the responses showed incidents where there was an overwhelming feeling of not being able to save the dying. This theme is related with dying mentioned earlier. Not only can attending someone who is dying be painful, but also if the effort to save someone remains unsuccessful.

*“It was an unpleasant experience seeing a male die despite all the efforts to save his life by myself and colleagues. Despite knowing no one was to blame and we had done all we could to try and save the male an investigation into our actions was still carried out”.*

This section focused on expanding on the knowledge about sensitivity and causes of trauma. Recalling figure 6.4 (chapter 6), the pre event factors were: team management, past exposure, on-going conflict, and logistics. Figure 8.4 summarises key themes in the current study.

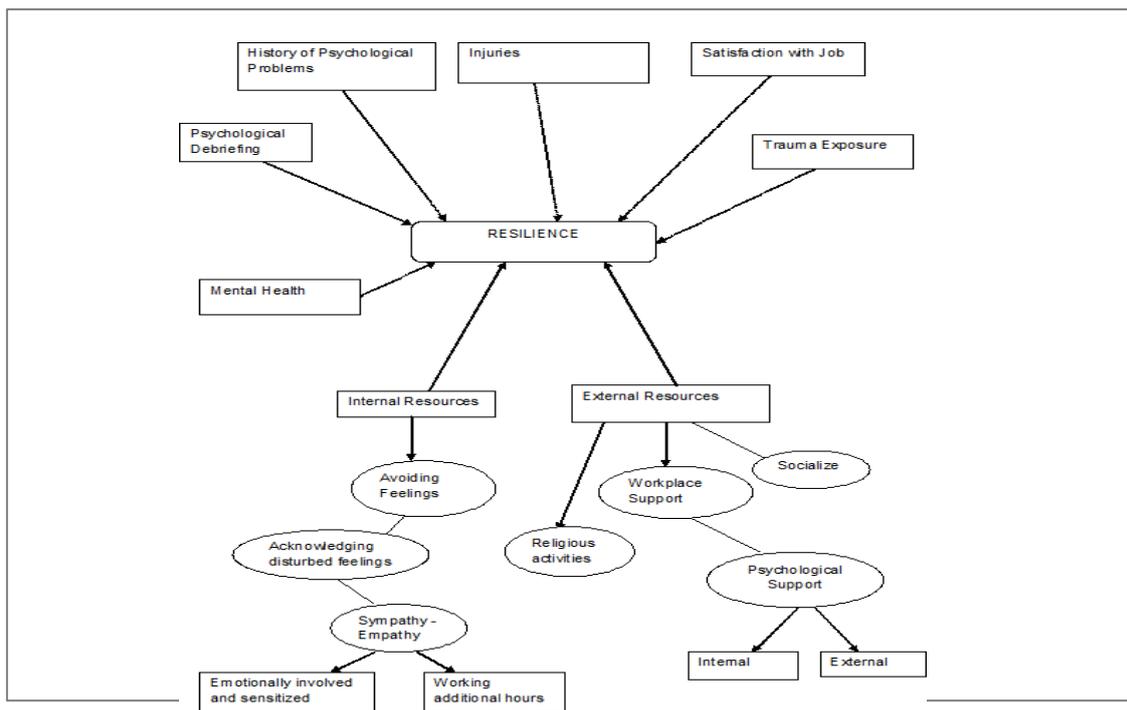


Figure 8-4: Summary of Key themes

## 8.10 Psychological help seeking tendency

The availability of psychological help related resources is an important aspect of the trauma healing or recovery. The mere absence of such a system may influence the psychological environment at any workplace. A very common feeling regarding this can be summed up as:

*“Sometimes I don't feel I have the support I need”.*

And so is true for the Pakistani personnel who have no access to any resources. Previously, the trauma nature and sensitivity were found to be associated with high emotional and psychological states. In order to overcome any psychological crisis, or to maintain psychological health, the participants were asked to mark options relating to various support groups they might seek help from.

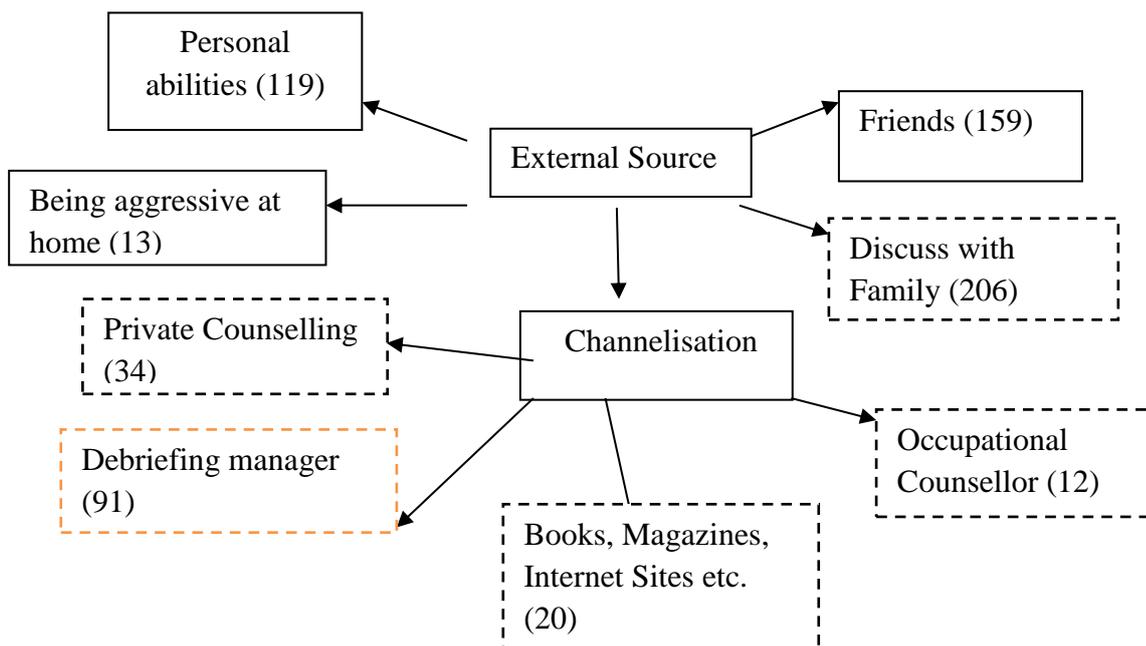


Figure 8-5: Coping ways (Responses from British Police Officers)

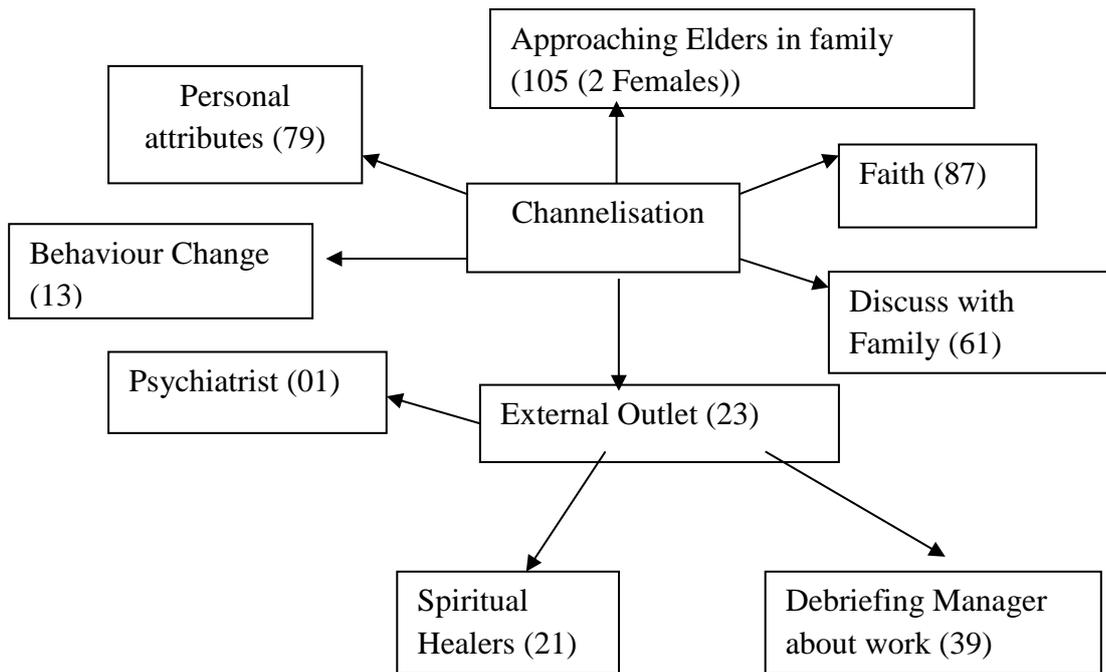


Figure 8-6: Coping ways (Responses from Pakistani Police Officers)

Figure 6.5-6 indicates number of police officers indicating ways to cope from psychological disturbances at workplace. According to the figures, a large number of British police officers sought family support or had adequate self-help skills to overcome personal problems. Pakistani police officers, on the other hand, indicated that they would prefer seeking elder advice, and the religious affirmations to cope from psychological disturbance. These responses are helpful in understanding what kind of resources is preferred in terms of seeking psychological support.

## 8.11 Psychological Support Seeking Behaviour

It is important to understand what is meaning of support to these officers when they are seeking psychological support. As part of the major inquiry, the officers were asked to indicate what is their preferred mode of seeking support? Following table suggests response from both police forces:

Table 8-2: Psychological help seeking preference in British Police Officers (n = 313)

Support Network	% age of participants
A Psychologist	25%
A Psychiatrist	11%
A Medical Doctor	48%
Discuss with family	66%
Discuss with friends	51%
Discuss with my manager	29%
I can manage myself	39%
	6%

As the results suggest, a majority of the British police officers suggested preferring discussion with their family members or friends rather than going for a psychologist. Interestingly some of the responses showed the creative side of coping i.e., *internet surfing, reading self-help books.*

The responses related to psychological help indicated the following themes:

- *Due to the duty I fulfill I would have to inform my manager of this.*
- *Especially discuss with my wife she is very supportive and understanding. Would also possibly go to OHU, wouldn't discuss with line manager as not sure if they can be trusted. Especially after how I was treated in 1989 by my then line managers,*
- *Have read a book as recommended by my psychologist - "Never Good Enough"*
- *How to use perfectionism to your advantage without letting it ruin your life by Monica Ramirez Basco. Also read Force personnel policies on stress and some internet research.*
- *Having been though Stress I can now manage it myself but I did see a counselor previously who advised I had to stand up to my supervisors which is virtually impossible in this job as they have no compassion or understanding.*
- *Having observed psychiatrists in a professional setting on many occasions, I have always come to the conclusion that they are madder than the person they are assessing. There is no way I would willing consult a psychiatrist !*
- *I feel confident that I would and could seek help from whoever I felt necessary. having said that I don't feel the need. I generally talk to my husband.*
- *I keep things to myself, not sure who to speak to*
- *I prefer to self-manage but if I need further support I would probably speak to a*

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*psychologist. Known faces can be part of the problem.*

- *I wouldn't volunteer to a psychologist or psychiatrist as I feel it would affect people at work respecting my ability to cope and would they still find out if I referred privately.*
  - *Occupational health*
  - *OHU at work*
  - *Private counsellor - paid for by myself.*
  - *Self-help groups*
  - *Sometimes I don't feel I have the support I need.*
  - *Sometimes I feel like I can manage my problems myself however when it does reach breaking point I speak with my husband or Doctor.*
  - *Still under the Mental Health Team in my local NHS area.*
  - *Unknown?*
  - *Would not feel comfortable seeking medical (professional) help in that it is expected for officers to be able to deal with and cope with all situations, and to seek help is considered a weakness*
- 

Table 8-3: Psychological help seeking preference in Pakistani Police Officers (n = 300)

Who would you seek help from if you had a psychological problem?	
A Psychologist:	89%
A Psychiatrist:	78%
A Medical Doctor:	85%
Discuss with family:	84%
Discuss with friends:	81%
Discuss with my manager:	28%
I can manage myself:	17%
Other (please specify):	3%

The majority of the participants showed tendency to see a psychologist, psychiatrist, a doctor or discussing with family/friends. Contrary to the responses from British police officers, very few rated as being able to manage the crisis themselves. A comprehensive number of British officers showed faith in their own abilities to deal with their problems. In addition to that, the subjective responses indicated the extent of the dissatisfaction over psychological services and expressed a “fear of a black mark” on their careers – an obstacle in seeking help.

This comparison can be illustrated clearly by the following graph:

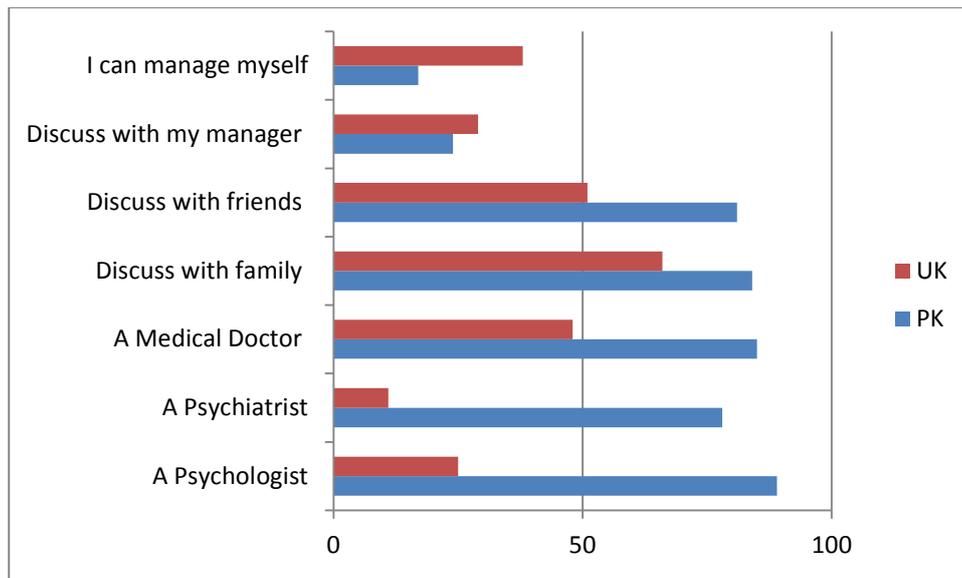


Figure 8-7 Tendencies to seek psychological support

Contrary to the responses by Pakistani police, there is a lack of awareness about psychologist or seeking help for psychological problems. Although they would prefer to seek support if provided, yet the unavailability and unfamiliarity constrained their psychological consultation tendency.

*“No concept of consultation, I hardly heard of it”.*

(Pakistani, 41 yrs.)

The responses might indicate an element of projection. So research bias is possible and findings must be considered with caution.

#### *Causes of Psychological Consultation*

Quite a few numbers of respondents answered a qualitative question which addressed reasons for psychological consultation.

The following themes were generated by process of coding:

*Intensive Emotional/Physical Reaction to trauma exposure*

Some of the police personnel reported having experienced intense emotional reactions following critical incidents which had a detrimental impact upon their lives. For example, one of the officers, explained:

“Counselling following cot death described earlier, due to intense emotional reaction after the event”.

Related Incident shared earlier was:

*Attending a cot death in 2004. I was a patrol sergeant at the time (in my previous force).*

(British, 51 yrs.)

## 8.12 Stress, Depression and other Diagnosed Clinical Disorders

Some of the police personnel disclosed the severity of the illness as having been diagnosed as PTSD, stress or other disturbances. As the responses illustrated, the reasons could still be traced back to organisational pressures and typical performance culture within the police. For example: A police officer quoted:

*“Work didn’t support me after the accident. They delayed arranging physiotherapy. They were pressurising me into returning to work early. I was placed on half pay. I still to this date have not got a chair recommended for my condition, I am still waiting. I was bullied by my new inspector on my return to work. Inspector and personnel made threats to take my job from me if I didn’t complete physical training, which even now I am unable to do. I didn’t receive treatment for PTSD until July 2010. I then had to re-attend for further treatment in December 2010 to deal with the lack of support and bullying issues. I am still on very strong medication and in pain daily. My mood is very up and down due to the on-going injury and pain. I was driven to having a nervous breakdown last year. I was feeling suicidal and had enough of it all. I wrote my will and gave all my clothes to the charity shop. I have never felt so bad in my life. The accident was bad enough to deal with on its own. The total lack of support from work has been even worse. The injuries are still on-going and I am awaiting a further appointment with the consultant. The only support I received was from Dr Shinn at occupational health. The inspector had even cancelled my first appointment with the Dr without telling me and I turned up for it. The whole treatment from the force has been shocking. I was told to mention the DDA to them which I did. Nobody seemed to know anything about it and nothing further has been said regarding it. Advisors at the police treatment centre said I will be covered by this. Dr Shinn has had trouble convincing me I will not lose my job. I have had financial hardship due to half pay. I am unable to return to my previous role and have had to take a new position which is office based. I asked again for a chair which has now been identified and I am waiting for it to be repaired. I think the workplace should be more supportive and all the treatment should be available and accessible. Without the treatment from the force psychologist and support from Dr Shinn I would not be here today! I have had to beg for everything I*

*have received and the majority of e-mails I sent were ignored. This is all through getting injured while performing my role as a response officer”.*

The above-mentioned narrative is self-explanatory and indicates the sort of problems that are causing a delay in getting psychological support or having proper channelisation towards the treatment plan. Researchers have addressed these issues, but due to the lack of a number of personnel, the issue of timely treatment is still challenging for the forces.

### *Psychosomatic Complaints*

Some officers quoted having mild to severe symptoms of panic attacks and other ailments that were triggered by psychological pressures at the workplace and home. Following the narrative might illustrate this point.

*“During a particularly busy period in my work and private life I started to get panic attacks which 7 years on are still bothering me*

*After being promoted to sergeant I initially was posted to a team with 5 sergeants within two months I was the only sergeant left having to deal with 30 staff and the workloads. The pressure became too much and when two new sergeants started and were sent to a quieter area I felt abandoned and ignored. I began to have chest pains and lack of sleep which exaggerated the initial problems and eventually I had to take sick leave.*

*In 2001 I saw a psychologist after excessive work demands led to shallow breathing, restlessness, poor sleep and confrontational behaviour. I continued to work throughout the consultation period. 2004 was very similar to the above. Again I continued to work throughout the consultation period. In 2011 the excessive work demands and performance culture induced sleepless nights, constant thoughts of work 24 hours a day, extreme fatigue, loss of concentration, muscular twitching and submissive behaviour due to all loss of self-belief. Diagnosed with clinical depression. 3 months medically certified sick leave. Recently returned to work and doing well so far.”*

These examples illustrate that physical problems have a lot of latent psychological discomfort which is consequently responsible for psychological and behavioural problems. For example increased heart beat and palpitation is a common indicator of anxiety or stress.

### *Workplace conflicts*

Another important cause that is a growing concern for the officers was workplace bullying and conflicts with line managers and colleagues. As it might already have been clear by one of the examples, some of the officers felt that they were the target of unjustified disciplinary action whilst they were honestly performing their duties; this in return was causing distrust in police work.

### *Feeling worthless after poor decisions by management*

In most of the cases, police officers held the opinion that post incident care were minimal from the management side. This was

*Went to one counselling session following the stress of bullying by the supervisor*

### 8.13 Challenges towards coping and confronting a trauma situation

Police officers suggested variety of issues concerning coping from trauma. Some of the issues raised were related to managerial support, logistics and family issues. A few, however, said that there was no support at all.

“Sometimes I don't feel I have the support I need”.

The responses also indicated several challenges involved in trauma management. These responses were explored in order to identify factors that might need particular attention.

### *Fear of a black mark*

A large number of responses showed concern over being held accountable for performance and pressure from work as great challengers towards trauma effects management.

For example;

“You don't contact anyone as doing so might hinder your police Career 'black mark on your file”

### *Fear of Contempt*

I often feel stressed over work / personal issues, but feel unable to approach anybody through work as I feel this could become a negative mark against me.

Contacting a psychologist or someone related to the problems was considered as a possible threat to their career. This also shows a lack of trust in management and poor psychological infrastructure.

Spending long hours away from work was possibly one of the major concerns of police organization but this was also reflected as a stressor.

“During the miners' strike 1984 - 1985 I was asked by the Welfare Unit how I was doing due to the long hours spent away from work and home”.

Sometimes staying away from work might help reduce pressure

“First time I ever went off sick was for stress, due to combination of work / financial / relationship issues. Saw GP, and subsequently saw Force psychologist, but by then the 2 week break from work had already sorted me out”.

Clearly, the excessive work demand overwhelms the individual's ability to remain resilient and active to perform duties. This quite often contradicts with the performance culture codes of conduct. The suggested time out from work might help the officer but in the long run, since the trauma exposure is permanent, this does not look like a permanent solution.

There were mixed responses regarding support provided after the incident. Few respondents showed anger and frustration in their responses for being held accountable while ignoring the psychological injury and showing sympathy to the officer by the management.

#### 8.14 Tendency to seek psychological support

One of the components of the investigation was to understand the help seeking attitude among the police officers. Some findings are tabulated as follows:

Table 8-4: Psychological help consultation in Sample (n = 613)

Country	Yes	No
England	41.5%	58.5%
Pakistan	11.0%	89%

As evident, the trend of psychological consultation has not been very frequent in Pakistani police officers, yet it is fairly sought by the British police officers. Coding resulting from interview transcript analysis provided 13 different themes reflecting coping methods/approaches as preferred by respondents. These themes i.e., channelizing approaches were quantified. The following descriptive analysis shows mean and SD (standard deviation) for each variable. The alpha reliability was found out to be 0.81

Table 8-5: Channelizing approaches of trauma

Approach	N	M	SD
Discuss with someone	494	6.41	2.34
Avoid disturbing thoughts	550	2.43	1.17
Rationalise thoughts	547	2.49	1.13
Over concern and sympathise with Vitim's family	384	2.63	1.28
Socialise	611	2.13	0.84
Seek comfort from faith	611	2.33	1.33
Seek seniors advice	611	3.31	0.91
Use humour	611	1.99	0.84
Seek friend's advice	611	2.03	0.87
Seek help from colleagues	611	2.25	0.90
Give extra time to task in hand	611	2.12	0.71
Training	611	2.23	0.84
Self management of stress	611	1.95	0.80
CISD	611	1.94	0.24
MHC	540	1.93	0.26

The table indicates that a majority of the police officers scored high means for seeking psychological support by discussing it with the family followed by tendency to avoid it, rationalise the disturbing thoughts and attempts to sympathise with the grieved family.

### 8.15 Summary

This chapter examined the themes related to traumatic experience and coping across two countries. The thematic analysis was based on Grounded theory approach in order to compare the themes between police in the two countries i.e., Pakistan and England. The analysis identified themes in four major categories namely: Causes of trauma, Content of trauma, Emotional Reactions towards trauma, Response and Coping to trauma outcomes, Psychological Support. Although the majority of themes overlapped between the two police forces, the analysis suggested that religion was a strong psychological support for Pakistani police officers. The chapter further explored the religious affirmations in the context of Christianity and Islam. Moreover, the climatic conditions of Pakistan, including extreme weather conditions, and poor electricity, long and undeclared number of hours for the duty, were some of the significant triggers causing emotional control. For Pakistani police officers, financial problems, lack of support and supervision from government and police authorities, poor logistics, lack of coordination within police system, police culture, ambiguity in roles and duties, and problems in the family life were responsible for workplace psychological problems. For the British police, the issues related to increased performance pressure, lack of trust over the psychological services provided by the force, fear of black mark, lack of understanding of law amongst the public were some of the

causes of emotional outrage. Terrorist attacks on public and religious places was a mutual concern, while a majority showed concern over insignificant number of police officers leading to work load on the existing police officers. The last theme examined the availability of psychological support in the two police forces. It appeared that although the Pakistani police had insufficient perceived psychological support, they relied on religious affirmations, family and social support to achieve tranquillity in professional and personal life. These themes reflect the general outlook on life as positive and constructive. The later part of the chapter discussed the tendency to seek psychological support. Findings revealed that a vast majority of police officers prefer to seek the support from family and friends, religious guidelines, or self (using self-help books or internet resources, engaging in healthy habits such as jogging or swimming) but were reluctant to seek support from colleagues, supervisors or force affiliated health advisors (psychiatrists). This reluctance was due to fear of being reported or evaluated and its effects on work performance. Officers from both countries raised this concern, although the Pakistani police officers appeared to seek their supervisor's *appraisal* rather than consulting for psychological (or professional) concerns. The findings from chapters 7 and 8 inform the conceptual framework as elaborated in the next chapter. This model integrates the existing models on trauma and coping and introduces the themes from the present study such as performance culture, role of religion and influence of indigenous coping methods.

## 9 THE TRAUMA METABOLIC PROCESS MODEL (TMP)

### 9.1 Introduction

Having looked at what comprises a trauma in police work scenarios and what factors related to positive adaptation in the form of increased resiliency and better mental health functioning, this study conceptualised the process of dealing with traumatic experiences in the form of the conceptual model. This study was mainly concerned with learning the psychological implications of exposure to traumatic situations in two nation's police forces, by looking at the anecdotal personal experiences as well as the survey responses to a set of questions. The study argued that despite the fact that the police personnel are exposed to a large number of traumatic incidents in their career life, there is little information about how these experiences impact at a personal level considering cross culture boundaries in expression of trauma response or reaction. This study was an intellectual journey towards filling this gap and gaining a better understanding of the cognitive transformation and bonding involved in the coping processes related to trauma experiences. It gives rational importance to the human side of policing by focusing on emotions and feelings which are the most ignored area of policing. It was anticipated that the project would identify the cross-national trends of coping and challenges involved herewith.

The purpose of this research project was to develop a model of understanding about the psychological pathway involved in police trauma reaction and response generation. The human aspect of policing is often an ignored area probably because in the police profession, there is no place for feelings or emotions (Stephens & Miller, 1998). This research gives due importance to studying emotions and emotional control and how it contributes towards achieving psychological equilibrium.

At the initial level, it was considered appropriate to adopt a grounded theory approach because it would enhance the validity of the information from a naïve population where no statistics prevail about the current mental health situation. Moreover, GT allowed each phase of the project to emerge from the findings making the information more contextual and realistic. The idea that the data generates theoretical understanding (Strauss & Corbin, 1998) was strongly held in the present study whereby a model was generated to help understand the role of emotions, feelings and apprehensions. The findings indicated that

the need to understand values and the belief system underlying each culture are unique to each individual and must be understood before the process of trauma can be conceptualized. Each individual is shaped by a significant upbringing culture, the Organisational rites, the political norms and pressures etc. the aspect of morality and nobility related to police work must also be taken into account.

## 9.2 The Trauma Metabolic Process Model

The term metabolic is introduced based on the argument that the digestive system process can be imaged to understand the processing of visual or auditory stimuli considering that these actions take place more at the unconscious or subconscious levels. The way the digestive system operates using natural body resources is very similar to the human emotional processing. The emotional experiences in human life stimulate a natural body reaction as suggested by the Hans Selye stress model (Banks, et al., 2011). In a similar way, the processing of emotions and positive or negative experiences occurs in rather a natural or unconscious way. Any emotional experience that has taken the conscious attention of the person comes into a category where there is need for external support or attention to process it. For example, witnessing an accident happening and seeing people dying can be extremely alarming and can stop/distort the natural way of stimulating this experience by the body. This could possibly result in extra psychological experiences, which may be unpleasant to the comfort level of the person involved. Considering the psychodynamic view, the subconscious affirmations coming from religion or culture help to redirect these experiences into a positive outlet, therefore the negative outcomes are defined.

Model to explain metamorphosis of "police emotional reaction"

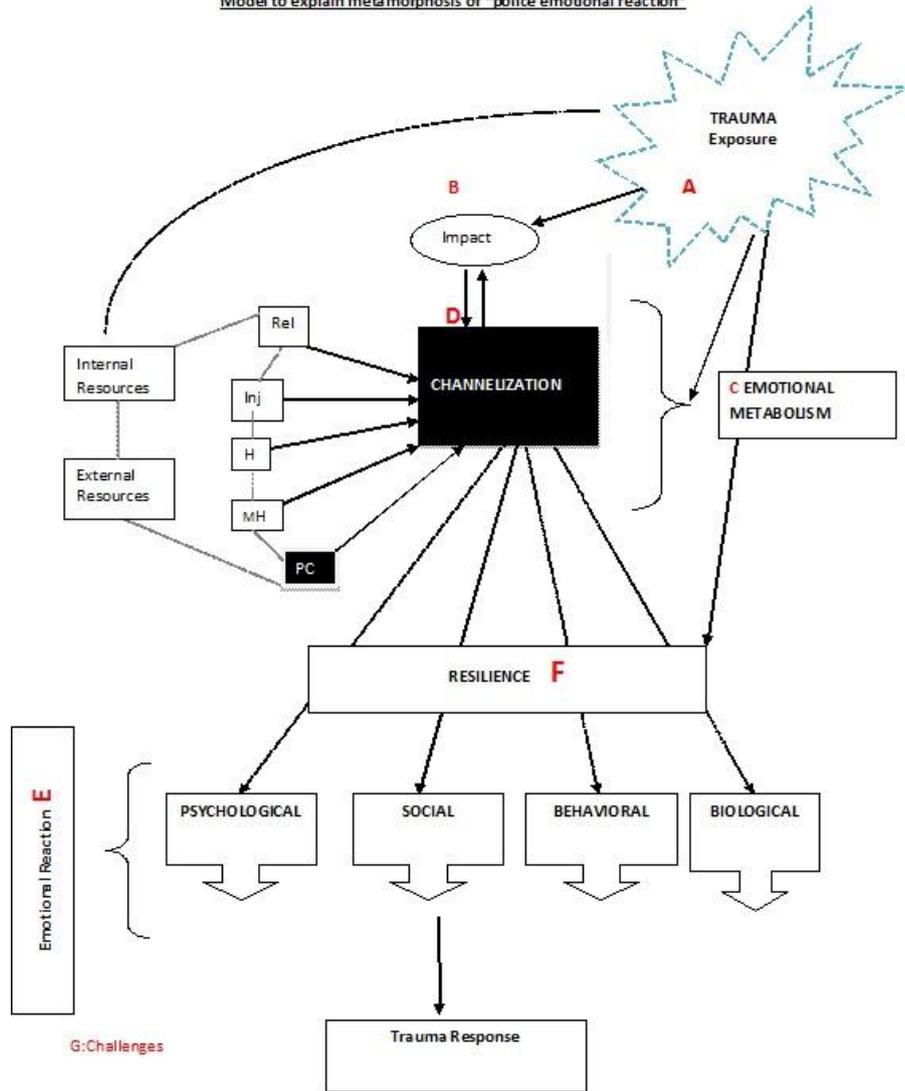


Figure 9-1: Trauma Metabolic Process Model

*Essence of the model*

The essence of this model is that the trauma is multifaceted and its understanding needs to take into account the unique experiences along with the values and belief systems of the individual. This means that the way a person’s cognitive development takes place would determine how s/he will react and respond to the situation. The research provides a detailed thematic analysis of anecdotes at three levels i.e., across the police in two nations, rank level and seniority level. It also attempts to understand the gender perspectives although sample representation was an issue. Just like with any trauma related research, the vulnerable population of police is exposed to a variety of ethical issues concerning the

personal life experiences and reliving of the grief moments. The researcher took into account the ethical norms before taking in-depth analysis of the themes. The themes helped to give a conceptual map of how trauma exposure could possibly be linked with exhibition of response.

This trauma model explains the relationship between trauma exposure, its impact, and emotional channelisation and how it leads to reaction/response related outcomes. It is based on the assumption that the emotional reactions play a pivotal role in the exhibition of a trauma response. The emotional control, in addition to subconscious affirmations, shapes the trauma response and therefore coping. The main components of this model are the interaction between circumstances of pre- peri and post trauma events which will be explained further. The most peculiar aspect of the model is raising awareness about one's reaction and response behaviour. The mind can be trained subconsciously to improve the coping methods on a regular basis. Since the nature of trauma is relative to one's subjective perception, the subconscious *modelling* of mind can help to enhance resilience. This aspect is detailed in coming sections.

This model is devised based on the participant's responses and findings using the grounded theory approach. It combines the findings from interviews and statistical validation. Interview themes suggested a strong influence of resilience tendencies, affirmations and perception, religion and support networks in terms of coping. These components were subjected to empirical investigation using path analysis and hierarchical multiple regression. The model is based on findings from the large scale survey (n = 613). It represents a police population from all ranks and experiences. It is replicable to other emergency services such as military or nursing.

#### *Revisiting the concept of trauma*

The fact that trauma exposure is predicted in police work gives a completely different orientation and outlook to the definition of trauma itself.

APA defines psychological trauma as:

“Direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one’s physical integrity; or witnessing an event that involves death, injury, or a threat to the physical integrity of another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associates (Criterion A1). The person’s response to the event must involve intense fear, helplessness, or horror (or in children, the response must involve disorganized or agitated behaviour)” (Criterion A2).

(Weathers & Keane, 2007, p. 110).

Although the definition is quite useful to conceptualize psychological trauma, it however, confines the scope of trauma experience by limiting its severity to a death threat or serious injury. An incident may not apparently have a fear of death factor or might not involve serious injury but it can still be traumatic. For example, in the present study, one of the respondents reflected the following about her traumatic experience:

*“This was the first time I had seen a dead body, this surrounded by the emotions of the family present proved extremely unpleasant. Also the male shot himself whilst we were outside and with hindsight I realised he could so easily have directed the gun towards us”.*

*“The train accident was horrific given the scenario we were faced with along with a female colleague who broke down at the scene accompanied by handling Press who were in attendance rapidly”.*

It seems that the indirect factors such as contacting those who are distressed can be traumatic and it is not accommodated in the present definition of the APA. A rather precise definition of a traumatic experience is as follows:

*“Although I had dealt with many deaths previously this was the first that involved murder and in particular that of a young person. The way the person was killed and the fact the body was partially dismembered means I can still see the murder scene vividly in my mind in comparison to other incidents I have dealt with over the years.”*

Encountering an incident for the first time exposes one to a host of emotional changes. It might be a new experience for an officer who has encountered a rather intense situation, and dealing with the emotion would be secondary to actually being aware of a new set of emotions. This was revealed in several responses where officers indicated a wide range of emotional experiences generated by encountering. Due to lack of time and need to carry out investigations, these emotions are not consciously registered by their minds, and eventually wither off with time. This is the reason why perhaps the experiences become transient, but they can reappear anytime the person revisits their past. In the life of a police officer, each incident or a happening is a defining moment to capture new

experiences and to notice changes in personality (and thus can lead to personal transformation).

The following anecdote provided further insight into further dimensions to the definition of trauma to be considered:

*“Deaths are never pleasant, but what made this incident stand out to me was the effect of the death on the family. I'm quite a headstrong person and jobs I attend don't normally affect me to the point where I can't 'switch off' when I get home. But on this occasion it was very difficult to forget about what had happened. At the time we attended at the registered keeper's address, the male was fatally wounded but had not yet been pronounced dead. He was on his way to the hospital in the ambulance whilst I was in attendance at his home address. As soon as we pulled up outside the address his partner opened the door and broke down in tears.... knowing something was terribly wrong. There were 3 young children at the address and an 18 year old who was with friends at a local pub. We managed to track down the 18 year old and brought him home in order for him to keep an eye on his younger siblings whilst we expedited their mother to the hospital. Whilst en route to the hospital it was broadcast to my colleague and I over our radios (which the lady could not hear due to us having our earpieces in) that the male had died. I informed the lady that when we arrived at the hospital we could go and sit in one of the family rooms whilst my colleague tracked down a doctor to let us know what was happening. At that point I already knew her partner was dead, and the female was hysterical waiting eagerly to hear news of what happened. I remember holding her hand as the doctor walked into the room, her grip so very hard, and she was shaking. I think she knew deep down that he was never coming back, and when the doctor gave her the news she just started screaming uncontrollably. It was a very difficult position to be in as a Police Officer. As a person you want to cry with her, and I could feel my eyes welling up, but as a Police Officer you have to battle the emotions and try and remain professional, and act as a pillar of strength. What can you say to someone who has just lost the love of their life so much sooner than expected? People often forget that we're only human, and when you strip away the uniform we're just a normal person working for a living. However, with the job comes an expectation... an expectation that no matter what job you attend you must remain professional, you must act in a professional manner, you must take charge of the situation and all its elements. It's the balance between the two that proves most challenging”.*

(British, 49 years)

The psychological trauma thus has been reconceptualised as “an emotional state occurring in close psychological proximity, where the traditional/routine expectations are questioned and the emotional pain is significantly memorable”.

This definition provides the following additions to the existing ones. The memorable dimensions of the trauma experience. It is not important whether the impact of the trauma was a short or long lasting one, the most important factor is the memory of the incident

and in what manner it shattered the old expectations and beliefs. This definition can be accommodated into the existing definition of psychological trauma offered by Pearlman and McCann, which states that:

A trauma is:

- a) Sudden, unexpected and non-normative
- b) Exceeds the person's perceived ability to meet demands
- c) Disrupts the individual's frame of reference and other psychological needs and related schemas (McCann & Pearlman, 1990).

This shows that the definition of trauma is very much a personal experience and depends upon how and what type of circumstances led to its conception.

This intrigued the investigator to explore how respondents perceive the concept. The themes generated from the thematic analysis revealed that the trauma is globally understood as any event which has emotive circumstances i.e., it provokes unpleasant feelings or association to the subject. This model defines the traumatic experience as:

From the themes, the traumatic experience was mentioned with the following terms:

### 9.3 The Subconscious route to the traumatic experience

The thematic coding identified a strong relationship between unconscious (unnoticed) emotional reactions converting into conscious behavioural actions. The interviews were useful in understanding the trauma appraisal, response and contribution of various coping mechanisms. The following sections describe how the idea of trauma developed into a definition and how various components describe the trauma recovery process. The latter part of this chapter relates the present study model with existing theories mainly being the Constructivist Theory, Theory of resilience and coping.

In this study, an attempt was made to reconceptualise trauma and coping by comparing the responses from two police cultures. This perspective may not fully represent the police population worldwide, but gives an objective understanding about the view from a developed and developing country police force. Rather than focusing entirely on the subjective experiences of trauma, the study opted for a mixed methodology approach to gain a better understanding of the psychological impact using a set of questions developed

after an extensive standardization process. This process helped to get empirical evidence of associations.

#### 9.4 Factors influencing psychological trauma

The exposure to trauma in police work is influenced by three basic factors i.e., nature of role/task, time limitation and completion of record taking/evidence collection, media coverage/community pressure. These unique contributors affect the intensity of impact on the personal wellbeing of the officer(s) involved in relief work.

##### *Nature of task/duty*

Most of the police personnel are deputed to protect and safeguard important or sacred places such as church/mosque, military buildings etc. In Pakistan, for example, a large number of police personnel are deputed in mosques, security offices or with the VIPs (Abbas, 2011). The threat of trauma exposure in such places is very likely and the risk of personal safety is relatively greater than controlling a mob or riot. This factor may influence the psychological impact of working under such circumstances.

Findings of the study showed that the placement and the nature of the duty itself is a great stressor. For example, for some, working on files and record keeping can be stressful, by constantly watching and reading the traumatic content could have simultaneous effect of one's own cognitions and understandings.

In the same context, for many Pakistani police officers, working with women was very sensitive and therefore traumatic, as women are considered an object of honour and any case related with them is dealt with a different mind-set (either not given proper attention and value or given undue attention). The study also showed that some work is less stressful or traumatic than others. For example investigating a crime scene itself is less traumatic than seeing a mutilated body or confronting insulting behaviour or act (for example angry crowd protests).

##### *Time Factor*

The nature of the task also involves urgency of completion of work. This is a major aspect of any police work as there are time limitations and a pressure to complete information as accurately as possible so that it can be evidenced against crime. The officers are mostly under strain of being held responsible for any shortcomings therefore they cannot afford to

pay attention to their own feelings or emotions. The gradual and consistent exposure to events makes the pain go away with time and the symptoms, being transient.

#### *Handling press*

Another aspect of trauma exposure was concerned with media attention particularly for the cases having political attention. Most Pakistani police personnel showed their raised concern about the stress resulting from handling the media and its criticism. The fragile nature of the job where any minister can dismiss them contributed to heightened insecurity among personnel. As in many cases, the media pressure itself was very stressful and depressive. In Pakistan, the police confront negative criticism from every sector of Pakistan, therefore media criticism only adds salt to the wound. Although perception about police officers is not bad in the Britain, still the criticism in media was found to be stressful.

#### *Closure and Proximity*

It is also postulated that the closed proximity of work can be a factor associated with trauma exposure. Office work may not be as traumatic as witnessing body parts at a crime scene, or attending emotionally charged individuals. In emergency work, the workers often have to work in close proximity with the deceased corpses. This may amplify the impact of trauma.

#### *Performance Culture*

This study identified the performance culture as an important contributor to discomfort for the British Police personnel although the issues raised were less emphasized by the Pakistani police. Performance culture refers to the evaluation on the basis of performance.

#### *The Thana or Police Culture*

The Thana or police culture is a strong factor influencing trauma exposure. This study found out that in Pakistan, the police culture is a unique contribution to overall frustration and evil practices prevailing in the police department. This includes blind and unchecked corruption, unjustified transfers, injustice, poor law and order situations, lack of coordination within departments and the nature of the interrogation method. This is unique to Pakistan and probably other developing countries police force such as India where the third degree measures are undertaken.

### *Problems related to witness*

In Pakistan, the lack of trust of the police leads to a lack of people coming forward with evidence or as witnesses. This is a great problem for the police as the cases go unresolved or unjustified only because of lack of witnesses. Since police are famous for mishandling, the people are generally reluctant to come in front for witness purposes.

### *Unpredictability of exposures*

Another factor could be the inconsistent nature of trauma experiences being exposed to. Doing a monotonous job is also stressful, but being exposed to an entirely new experience without previous history of exposure could be a factor.

These factors, and many others, describe what constitutes a traumatic event and what the characteristics of a traumatic event are. It is more detailed vivid and full of memory. Its representation is predominantly symbolic. The trauma event has an emotive constituent and some level of resemblance with the personal life of the individual affected. The other aspects of trauma exposure and its affects is discussed herewith

### *Psychological Reactions to trauma*

The model describes a wide range of psychosomatic reactions following trauma exposure. These reactions are sudden, transiently occurring, and wither away in a short period of time. Some of the reactions are discussed in the light of assumptions of the model.

### *Common stress*

It is quite natural to experience stress resulting from the pressure to record the details or by witnessing the scene. The stress induced by the event itself may rather facilitate the individual in remaining occupied with the details of the scene. The stress may cause the person to remain alert, panic, shock, palpitate, vomit or feel nauseated etc.

### *Emotional Numbness*

Emotional numbness refers to difficulty in expressing or experiencing emotions. The constant trauma exposures may induce the emotional numbness, which can act as a defence mechanism itself. This may also include conscious avoidance of feelings and thoughts related to the trauma or incident concerned.

### *Fatigue and tiredness*

As the work may become exhausting, the individuals may have a consistent feeling of being exhausted or fatigued. This could be a psychological state of being torn off from the problems.

### *State of depression*

In acute and rare cases, they may suffer from different forms of depression. The psychological literature illustrates several causes of depression but they can surround the police work itself.

### *Flash backs and nightmares*

In many cases, the trauma experience may bring flash backs and memories in the form of nightmares. This happens if the incident was of severe nature.

### *Reflexive Reactions*

The categorization includes immediate psychological reaction which is reflexive and involuntary. These include heartbeat, palpitation, nervousness etc.

### *Cognitive Reactions*

These may include confusions, distortion of time, space or place, rationalization and other defence mechanisms

### *Emotional Reactions*

These include a display (or numbness) of emotions such as anger, resentment, frustration, cry, etc.

### *Behavioural reactions*

These may include frigidity, anger, detachment, heightened alertness or focus, or opposite.

## 9.5 Trauma Responses in the light of Religion

The trauma response varied across gender, culture, and trauma context. The family was a strong support history of seeking spiritual advice (due to religious adherence as well). Offering prayers five times a day and reciting Quranic verses serves as a quick (and more accessible) remedy for healing from day to day anxieties and pressures. Several verses in the Quran are related to adversity and difficulties and how to cope with such atrocious

moments. According to the Islamic religion, it is believed that the calamities, pain and problems are a test from God and God will help those who are patient and therefore trust in God.

The Quran states:

أَحْسِبَ النَّاسَ أَنْ يَتْرَكُوا أَنْ يَقُولُوا ءَامَنَّا وَهُمْ لَا يُفْتَنُونَ ﴿٢﴾

*“Do men think that they will be left alone on saying, ‘We believe’, and that they will not be put to the test?”*

(Quran 29:2)

As many of the police officers were particularly religious, they stated religious affirmations as most beneficial. For example:

وَاسْتَعِينُوا بِالصَّبْرِ وَالصَّلَاةِ...

*Nay, seek (Allah's) help with patient perseverance and prayer*

(Quran 153:2)

Seeking religious guidance was also present in British police personnel, though not in the majority. Quite a few practised religious rituals, however, faith and belief in God served to be a great healing. Similar to the Quran, the Bible is a Holy book and it comprises of several verses, which help with advising how to cope in times of difficulty. For example one of the verse states:

*“When Jesus woke up, he rebuked the wind and said to the water, “Silence! Be still! Suddenly the wind stopped, and there was a great calm”. – Mark 4: 37-39*

Hope is an important message given by religion of all around the world to overcome anxieties, problems in life. Adopting religious practises is a great healer and convenient self-help strategy.

Since the number of psychologists or psychiatrists is limited, the traditional healers and support groups are readily available and are less expensive. Counselling services in Pakistan are still at the embryonic phase (Suhail, et al., 2009). Some forms of indigenous healing strategies recommended by the counselling services include Islamic religious healing practices, seeking Aamils or Pirs (spiritual healers), Hakims (traditional healers), palm readers or other forms of quacks (Suhail & Ajmal, 2009). Whilst these resources are helpful, their credibility is questionable.

The association between religion and health has caught significant attention in the past few years. The literature suggests that seeking religious support also helps to boost morale.

#### 9.6 Determinants of Effective Coping

This model distinguishes between coping resources available and the coping methods used and it continues to argue that it is important to know what coping resources are available to the system and individual involved. Since the reaction of each person varies depending upon his/her experience, the time to regain equilibrium is also different, therefore no clear coping strategy can be identified which works universally for everyone. The resources, however, are the key for enhancing the expected coping skills in the individuals. For example, the organizations may ensure that they have a proper counselling and support system and recognition of psychological issues before they expect their employees to be resilient enough to handle the battle themselves. Moreover, coping resources can be created by the person themselves depending upon their culture and belief system. The following figure explains the determinants of coping when an officer is exposed to a traumatic incident.

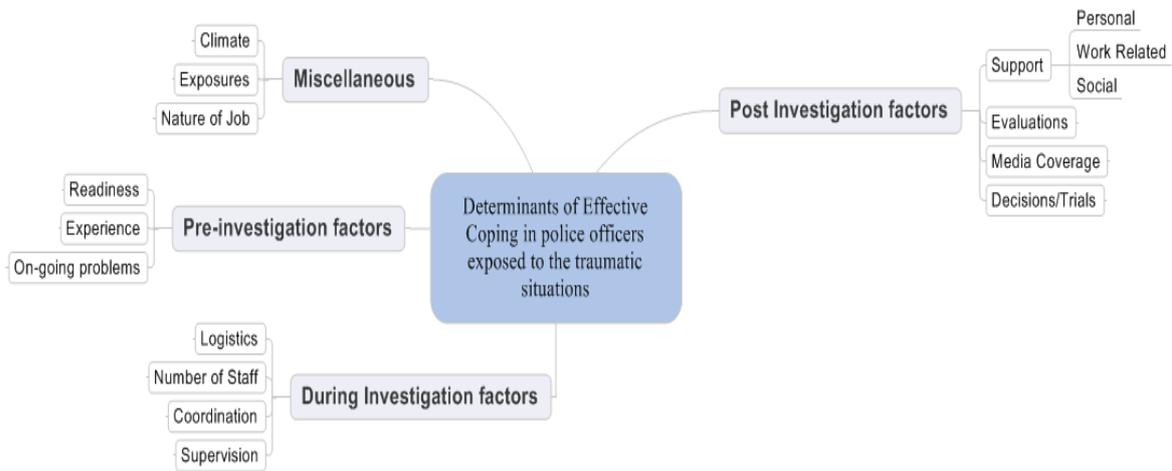


Figure 9-2: Determinants of Effective Coping in police personnel dealing with traumatic situations

### *Internal Coping Resources*

These coping resources refer to using personal means to cope with the trauma. These include self-reflection, reading books and self-help techniques.. In the study the participants showed that although they had no real means of support, they could gain a better understanding of how to solve their crisis by giving time or by engaging in another task which is called diversion or distraction.

### *Self Help Skills*

These include consulting or reading books, magazines, healthy diet or exercise, socialization, cycling, taking the day off with family or close friends etc.

### *Internet Resources*

These days due to the advancement in technology, a lot of websites provide information about post incident care

### *Books*

Reading books is a good hobby, it can increase the knowledge and also it can help to overcome grief and stress.

### *Use of positive emotional states*

Some of the officers use humour as a tool to induce positivity and cope from problems at the work place. Studies show that humour is a strong determinant of positive coping (Overholser, 1992; Romero & Cruthirds, 2006).

### External Coping Resources

Several police officers used external coping resources. These included seeking social support, psychological services, friends or colleagues, family.

#### 9.7 Coping as a mediator towards resilience

Findings revealed that ways of coping is a mediator between trauma exposure effects and resilience. This suggests that introducing constructive coping mechanisms can help in reducing effect of trauma exposure, thus enhancing resilience.

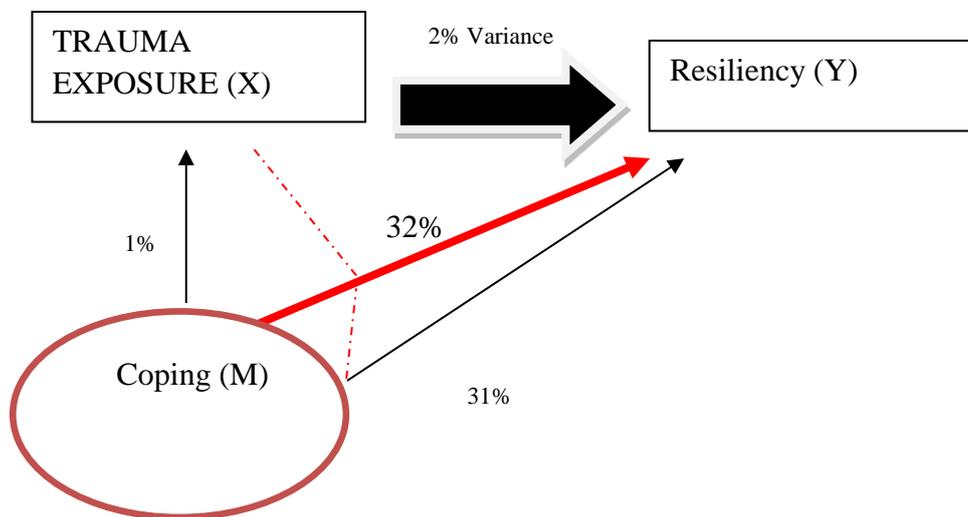


Figure 9-3: Mediating effect of coping on resilience

We can infer from the diagram that the use of coping skills may actually mediate the cyclic process of trauma exposure and resilience as explained in the figure below:

#### 9.8 What factors influence resilience?

Resilience is a relative term and its understanding requires bringing into question the nature of circumstances and goals. As in policing, the difficult experiences induce vulnerability, resilience can provide a protective shield against such unpleasant outcomes, and can help police officers to maintain better mental health. For organizations, resilience

is a key requirement under the circumstances where they are required to confront danger and exert force when required. In terms of policing, a psychologically resilient person is the one who is able to perform well under stress, is resistant to the pressures originating from the work and is able to adjust to future challenges. The third research question explored in the present study was regarding those factors that appear to influence resilience. By testing a model containing demographic variables i.e., age, gender and service duration, trauma exposure frequency, trauma impact, mental health status and coping approaches, the findings affirmed the prediction that all these variables were associated with resilience (see table 7: 23). Contrary to the findings from the literature, however, the age and gender did not contribute significantly to the scores on resilience in the present sample. This suggested that gender and age may have weak association with resilience. Age of the officers was inversely correlated with the resilience thus indicating that senior police officers are less resilient than the junior police officers (see table 7-21). Violanti (2007) argues that with age, one's resistance to psychological pressures may decrease thus influencing motivation to continue facing the threats and crisis. Another possibility could be the nature of work itself, personal problems or professional disagreements.

#### *Characteristics of a resilient force*

Findings showed that trauma frequency was not a determinant of resilience. The second research question investigated the interaction between trauma exposure and its impact. Findings revealed that although both forces are resilient at satisfactory levels, the Pakistani police was less resilient as compared to the British. Moreover, those police personnel who had better mental health had better resilience.

#### *Modelling the trauma experience*

The TMP model describes trauma experiences as a subjectively unique experience combining humanistic aspects of psychology as well as interplay of person, place and event itself. The realism of being exposed to events contributes to the overall sense of preparedness and readiness to face any sort of circumstances, so the element of shock can be eliminated. The denial is a defence mechanism which helps in preparedness to face the psychological problems.

## 9.9 Aspects of coping according to the TMP model

### *The Coping defined*

Coping has been operationally defined as a response to a traumatic encounter. It is also defined in terms of the resources available and their preference of usage i.e., the tendency to use coping resources. This model argues that the coping resources are used subconsciously because of religious suggestions or affirmations. In Muslim society, religion plays a primary role in almost every aspect of life. Police job is considered a noble or a charity task and performing a duty is itself considered the equivalent to a pilgrimage<sup>34</sup>. This aspect gives a different outlook towards how a trauma is perceived. In the cross-national comparisons, it was observed that the trauma perception was governed by the religious affirmations which provided meaning to life.

### *Subconscious Coping*

Most of the time coping actions take place at a subconscious level. As the pre-assumed expectations play their vital role in apprehending the trauma, which has not yet taken place, the intensity of the trauma decreases because of its apprehension. This is contrary to the definition of trauma. The trauma is sudden and unexpected, but in the case of policing it is very much expected and usual. What makes it traumatic is the left over feelings and the lack of control or overwhelming state. Therefore, it can be assumed that it is not the incident or event itself, which is traumatic; it is the outrageous feelings and emotions which affect the normal coping process of the body.

Emotions play a crucial role in handling stress or crisis in everyday life. Literature on emotional control continues to suggest that by directing the feelings or emotions positively, perception of the situation can be made rather realistic and a rational solution to a situation can be figured out easily.

### *Conscious Coping and Chasing Phenomenon*

It is argued that the conscious attempts to cope may lead into a stressful struggle and can itself lead to amplification in psychological anxieties and troubles. This means that undue attention to the needs of being fit or performing well may lead to an increased alertness or

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<sup>34</sup> Religious ritual in Muslim faith, where Muslims visit Saudi Arabia to perform Haj ritual

anxiety and in some instances may contribute towards the development of disorders. This aspect needs further exploration.

#### *Management of resources*

It is also argued that the lack of resources might not be as much of an issue as utilisation of the existing resources. As it was observed in the Pakistani police sample, religion and social support were readily available and optimally utilised as subconscious sources of coping from day to day stressors. Although other professional support networks were unavailable, the societal norms and practices shaped the way they thought (i.e., their belief system).

#### *Understanding about support and its needs*

Understanding about support and associated needs is an important aspect of mental health care. What is the meaning of support in a society or a culture and to what extent its requirement is felt or needed? This study showed that the support of psychological help is rarely understood in Pakistani society. The understanding about psychological effects existed but the channelization sources were not consciously thought about. Most of the attempts were part of their personality or livelihood. On the contrary, British police had a variety of resources to offer help which were often utilised by the officers when in need. The challenging issues raised in the themes were related to lack of trust over force psychologists.

#### 9.10 Tools for coping

##### *Defence mechanisms*

Defence mechanisms act as subconscious tools of coping and they become an enriched part of ones' personality as time and exposure increases. The junior police personnel are more ambitious to learn and grow in the environment. Their exposures are more recent and are more prepared hence the study findings indicated that junior police personnel were more resilient than the senior police officer. Officers from both countries stated the use of the following resources in order to cope and move on in life:

1. Religious practices
2. Organisational Support Network
3. Family
4. Friends

5. Community
6. Media
7. Self Help Skills
8. Humour and Faith renewal

#### 9.11 Resilience and coping as integral components of trauma recovery

Coping is directly related to uplifting and the increase in resilience. The constructive use of tools mentioned above may facilitate resilience. The study findings indicated the mediating role of coping in that it helped to reduce the overall impact of trauma exposures, by increasing resilience as shown in the figure above.

#### 9.12 Resilience is a cyclic process

This model suggests that resilience is a cyclic process whereby each exposure leads to an increased understanding of resistance and exposure. For example, an officer attending a crime scene for the first time may be more reluctant but as the gradual exposure increases, resilient tendencies become stronger. It is not, however, how it happens always. In some cases, the individual may withdraw notwithstanding the pain or disgust evolving from such sights. This is again a question of preparedness, which is essential in an officer's attempt

#### 9.13 Morality and Nobility

Police work is considered a noble job, which is similar in importance to doing a pilgrimage in a Pakistani society. Therefore, the intention of helping others, doing a form of charity, helps these officers to gain a unique understanding about how they will deal with the psychological outcomes.

### 9.14 Path Analysis: Statistical Verification of model by using Path analysis

As indicated in earlier section (page 206, section 7.25), path analysis was used to verify the statistical relationship between research variables. The following figure provides statistical evidence and direction of relationship between regression models.

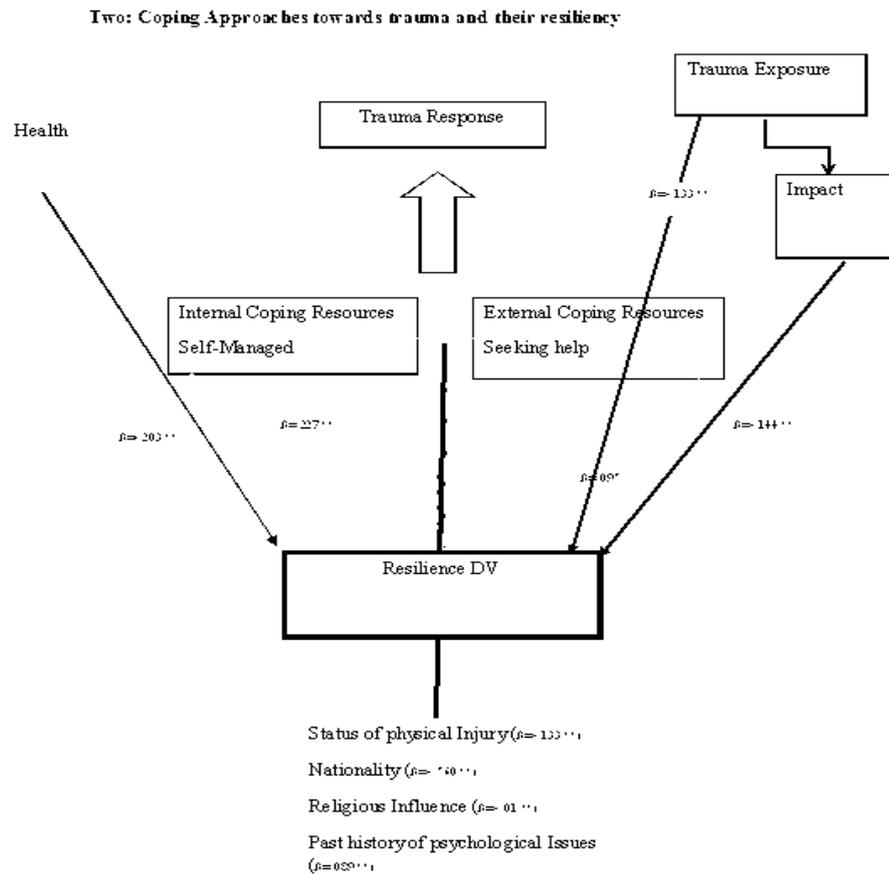


Figure 9-4: Path analysis

The statistical analysis carried out using Pearson product moment correlation suggested a significant relation between the variables indicated above. This figure suggest supplements the validation of conceptual framework.

## Process of trauma (Modelling the response to trauma)

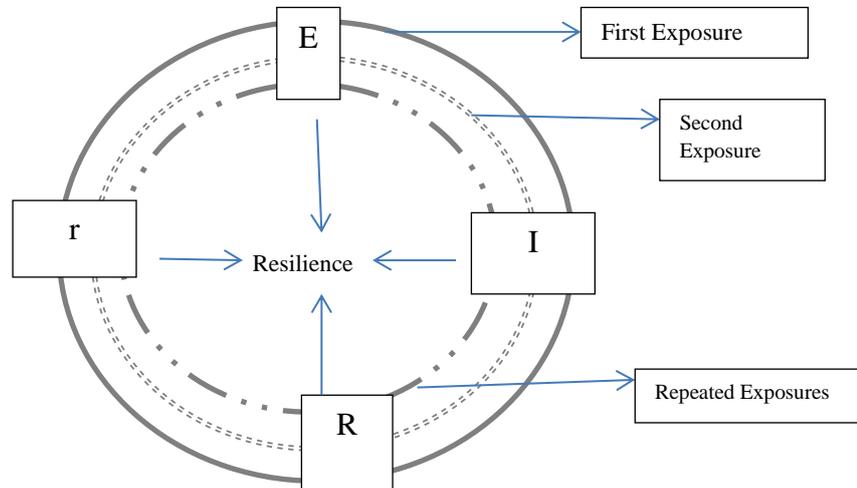


Figure 9-5: Impact of exposures on resilience

A trauma response is a complex array of factors, which influence to determine how a reaction would be like. This study extends Harvey ecological model of trauma (see figure 9-5) explaining how an event results into a response by describing the filtration or refining of the trauma reaction – response process. The present study findings suggest that the reaction and response are determined by the subjective interpretation (I) of the individual gained from various cultural, societal or Organisational resources. It takes into account the experience factor and also examines how they multiplex factors contribute to the resilience. This interpretation of an event precipitates the reactionary symptoms (R) and eventual response (r). This cycle improves with each experience i.e., every time a similar event takes place, the interpretation of the event modifies (due to resilience) and as the learning process goes, the reactionary response improves.

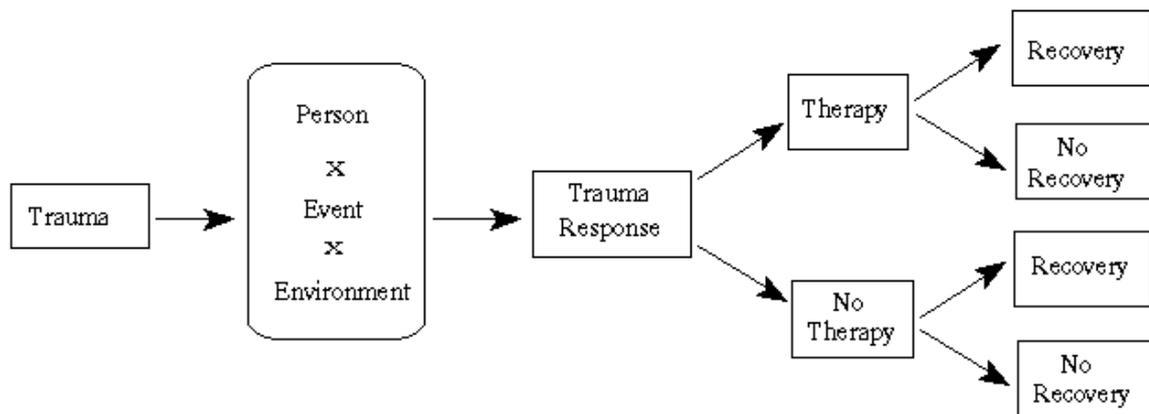


Figure 9-6: Harvey Model of Psychological Trauma

Four factors such as those described in the figure, affect the persistence of resiliency. An event, with first time exposure can be a real test for determining resiliency. Similar, an event which is not the first time exposure would be dealt with differently.

Compared to other explanatory models such as Harvey (1996), Stephens (Stephens & Miller, 1998), this model elaborates the cyclic nature of trauma experience and presents how such cyclic process influences resilience and determines coping. It extends the understanding of how each exposure adds to the forthcoming ones and prepares the individual for the rest of his life.

Although they describe the relationship of various elements relating the event with the response, the gradual improvement towards resilience is not described convincingly.

#### 9.15 Psychological support and its meaning

Alongside the trauma experience, it is equally essential to gain familiarity with the meaning of support in police culture. Since the predominant assumption is that police is support provider, not support seeker, this ideology influences their help seeking tendencies and trend. The international research positions great importance to the support meaning and symbolisation in contextual way to familiarise with the psychological affects. In the United Kingdom, and many other developing countries, psychological support is conceptualised as seeking professional psychological support.

However, the meaning is not the same in other countries. Seeking such sort of support like counselling is often tabooed in the Pakistani society and is considered a sign of personal weakness or faith weakness among ignorant and illiterate community. Since most of the Pakistani police officers are not well educated, they appear to practise the traditional ways of healing and spirituality rather than the professional help which is not available otherwise.

As discussed in the literature, a large number of personnel report work related stress at some point in their professional lives. The psychological complaints can be personal or professional. One of the research questions was to explore whether there was any history of psychological consultation among participants. Responses showed that relatively small number of officers sought psychological services (see table 7-1) even though comparatively larger number of personnel felt the need at some point in their lives (see table 7-1). Anecdotal evidence revealed that the majority of British police officers consulted psychological services for complaints such as depression, PTSD, behavioural problems such as bullying, panic and other personal concerns. The responses from Pakistani police were limited, but revealed that few of the officers consulted psychological expert due to family problems and work related bullying issues.

In countries such as Pakistan, mental health concerns are seldom discussed with a professional. Most of the times, people tend to discuss their problems or issues with close family members or friends (Karim, et al., 2004). In Pakistani culture, the parents have high respect and care and are first point of contact when in stress. Since most families are joint (parents live with their families), parents are primary source of help when it comes to trauma or any other difficulty. In other cases, spouse support, children and close friends are immediate help points.

Research evidence supports the finding that when suffering from trauma, police personnel tend to seek social support which helps them to cope and come out of difficult times (reference needed). Social support helps to reduce the strains experienced in day to day work, it may also alleviate perceived stressors (Viswesvaran, Sanchez, & Fisher, 1999). Much of the intervention programs now render greater emphasis on including social support groups (such as those included by the Metropolitan Police Force).

The fourth research question was related to mental health awareness and resources consultation. Responses showed that a small number of participants had attended mental health course or critical incident stress briefings (see table 7-1). In west Yorkshire police (England), debriefing programs have been stopped due to their lack of productivity and use. According to the force psychological expert, these debriefings were of little value in comparison to face to face counselling services, therefore stopped (anecdotal evidence). In Pakistan, very few officers consult their managers and discuss about the debriefings due to fear of being evaluated. However, they agreed that speaking to managers and sharing problems, concerns or achievements can be very helpful in boosting morale if seniors are supportive and unbiased. For this reason, although majority of Pakistani police personnel suggested seeking managerial support, such discussion was deemed risky.

These results are not surprising as in police culture (the set of rules and regulations related to police work); the police role renders several barriers for police personnel when it comes to seeking support. Most of the personnel want to remain in good books and hesitate in officially reporting their psychological injuries(Henry, 2004). Those who report are accused of false claims and sick leaves/absentees.

These findings provide crucial information about mental health care situation in both countries. Whilst the support facilities are readily available in the UK, the lack of trust over force psychologist, performance culture as evidenced by their anecdotal responses, is still is a big concern. For Pakistani personnel, lack of proper facilities in addition to having no awareness about mental health care can have devastating effects. The effectiveness and credibility of psychological services is still a question when the existing conflicts remain unresolved (for example personnel security and safety measures). Mental health of personnel is a big issue especially under conditions of poverty, corruption, poignant work conditions and trust, poor supervision and support. Police authorities need to understand importance of mental health support for its employees.

Although seeking psychological support is voluntary, the force needs to arrange proper intervention or arrangement for not only those who have suffered, but also to prepare those who are at potential risk. This can be done by including mental health awareness programs, workshops, activities etc. Inappropriate priorities (such as increasing salaries and money prizes and overlooking root causes or problems such as supervisor conflicts)

and inappropriate targeting of programmes (not personnel friendly, rather organisational friendly, performance focused) are not the only problems for Pakistan (and the UK) police. The Pakistani police have challenges related to psychological services provision which is still a growing area in the country. The psychologists are emerging in the field and can offer considerable help if understood and accepted. Although fulfilling the logistic barriers in short time might be unrealistic, encouraging and supporting staff by the supervisors can also mediate. As the anecdotal responses showed, supervisors and senior colleagues can play crucial role for mental health of its staff. Similarly senior staff can consult professional support besides trend of seeking family /friend help (which is always useful). This research also suggests interventions related to pre and post trauma care. This includes, being aware of trauma effects, risks and vulnerabilities, knowing personal traits (strengths and weaknesses), appreciating and rewarding achievements, cohesion between personnel from all ranks and colours etc. Intervention plans must be holistic, seek cooperation from all resources, and be sensitive to gender, culture and context.

#### 9.16 Summary

This chapter conceptually defined the variables as they were assessed in this research and developed a model of understanding the relationship between trauma reaction and response and how different factors interlink to affect resilience and coping. This model has been tested in previous chapters and found out to be useful in various settings. The model offered an integrated perspective of looking at how police personnel deal with traumatic incidents and experiences and how they learn and growth positively from it. This model is unique by offering positive growth related contribution unlike the ones offered by Harvey (Harvey & Bryant, 1999). This chapter introduced an explanation for the concept of trauma in the context responses obtained from the police officers of Pakistan and Britain. It also examined the role of coping resources on resilience and wellbeing. The chapter illustrates the conceptualising of trauma and later explained the role of subconscious suggestions in the process of coping. The chapter merged the mixed methods findings and presented a *trauma metabolic process* model, which illustrates that coping can be effective if carried out consciously and with raised awareness. This enhances the psychoanalytic model suggested by Freud, by acknowledging the influence of defence mechanisms as coping strategies, but provides further insight into how to control the subconscious mind, to train it to be able to recognise one's emotional reactions to the trauma. The model helps

to identify personal emotions and how to control them, thus it can be applied to various work settings where trauma content is involved.

## 10 DISCUSSION AND CONCLUSION

### 10.1 Introduction

The previous two chapters provided an enriched account of personal experiences of trauma which helped to gain cultural insight into the phenomenon of experiencing the trauma, seeking help and coping in two distinct cultures. Studying traumatic experiences was indeed a challenging task in terms of the amount of emotional pain it brought upon the recall among participants. The combination of interview technique and survey method helped to enhance understanding of the *nature* and *type, frequency and impact* of trauma experience in police tasks. Earlier chapter on the qualitative findings elaborated on the ways of coping and helped to identify specific challenges involved in coping for police officers. Moreover the qualitative analysis of interviews helped to devise questionnaire which was used in the main research.

The previous chapter presented a trauma model proposed by the analysis of the mixed findings from the present research. Undertaking a mixed methodology approach to facilitate the data collection the methodological challenges were addressed. The interpretation of findings was based on the theoretical models presented by psychological sciences to determine emotional-response patterns. Some of these include emotional models, coping theories, and ecological models of trauma. In the present research, the analysis of responses is based on a well-integrated paradigm called constructive self-development theory (McCann & Pearlman, 1990) and compared the suggested mode with other ecological models such as the Harvey Model (Harvey, 1996) and other emotive theories (Lazarus, 1991; Oatley & Johnson-Laird, 1987).

*Since* trauma experience is a broad concept and it incorporates several components in order to understand the phenomenon, this research examined trauma experience, exposure and impact, coping and resilience, mental health and psychological support in a cross-national police setting.

Prior to the discussion, it would be relevant to highlight some of the methodological challenges and limitations involved in the present research. The first challenge was the access to the police personnel in Pakistan. Since the invasion of terrorism in Pakistan, the pressure and security of these police personnel is at its peak and they appeared to be quite reluctant to take part in any sort of interview or research (because of the fear of a black

mark<sup>35</sup>). These issues were prevalent especially across the lower rank officials (such as sergeants). The researcher opted for a mixed methodology approach to be able to gather information from two different resources to supplement the results. Another challenge was unrest in the country. Continued bombing was a big hurdle towards arranging interviews and timings from police officials. This challenge was overcome by the help of police officials who provided safe interview sites. The researcher was accompanied by a significant other for the sake of protection and safety.

This chapter focuses on the three main aspects of findings which signify the research aims of the present research. The first, being the multivariate trauma and its re-definition in the context of culture and the individual perception. Another aspect is the statistical evidence of level of exposure, impact, mental health and resilience and coping resources. This section emphasises on identifying risk and vulnerability factors towards resilience and coping. The last part proposes a model to explain psychological / emotional reactions following a traumatic experience and how they are processed and shaped into a response which is observable in day to day policing. The three important findings related to the present research are: a) segmenting critical incidents in both countries b) the redefining trauma, coping and resilience and identifying predictors to resilience.

#### Rich Colours of Culture, Religion and Societal Norms

The findings suggested that police officers use a complex multidimensional framework of trauma experience in their perception. This framework comprises of their emotional strength, vulnerability, mental integrity, and their moral /professional obligation within the traumatic experience. This proposed framework is termed as “trauma metabolic process”. The term “metabolic symbolises the natural way of trauma experience processing, and argues that human beings are socially wired to behave and perceive in a certain way and that the adaptation is modifiable depending upon the nature of grief and its impact. In most of the cases, the respondents displayed positive growth and perception of how to deal with difficult situations. This aspect of their coping is the main focus of the entire thesis.

The emerging definition of trauma, as indicated by the narrative responses is:

“any incident or event that has the capability of triggering association/meaning and produces unpleasant feelings (transient or long lasting) which has an emotional component and involves some sort of humiliation”

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<sup>35</sup> The term black mark refers to having a bad reputation in such that it impacts the job performance.

Considering the definitions proposed by the APA or ICD, the inclusion of the aspect of humiliation can contribute to understanding the severity of the way trauma affects a person (Beins & Beins, 2012). It is a common observation that the trauma provokes human humiliation to some degree; it could be related to destruction of some religious property, people, slogans or words, witnessing human disgrace or being a victim of some sort of discrimination. This definition is extracted from responses of both country forces.

Cross cultural trauma literature suggests that residing in the city where trauma occurs most or watching trauma news on television can be simple triggers to the traumatic experience. Therefore the definition of trauma is no more restricted to an extreme happening involving some sort of a disaster. The new definition includes a wide range of events /conditions such as workplace relations or atmosphere, vicarious effects of trauma, helping a traumatised individual are some of the more expanded versions of trauma definitions.

The scientific evidence also suggests that there are different types of traumatic experiences ranging from natural disasters to childhood abuse which compromise the coping resources of an individual by containing specific stressors and emotional triggers. These stressors challenge the personality dimensions of an individual including their ego strength, identity, resilience, normal developmental growth and the capacity for normal developmental growth (Agaibi & Wilson, 2005; Green, 2004; Wilson & Lindy, 1994). These findings corroborate with the current research of explored domains which suggested that police officers interpreted the meaning of the events in their life mainly due to the interaction between ecological factors as well as situational context.

Traumatic incidents continue to happen in the world today. As depicted in earlier trauma related research work, positive growth is a growing area of interest following critical incidents (Inman & Ogden, 2011). An enriched reflection of traditional methods to deal with the unpleasant feelings or emotions was noticed. For example using elderly advice is commonly practised in Pakistani society. Family bonds are very important part of Pakistani culture because relationships are of key importance asserted by the religion of Islam (Hampshire, Blell, & Simpson, 2012). Similarly, gender roles and economic situations vary between both countries. The research findings confirmed findings from the earlier studies about the multifaceted nature of trauma experiences. One of the significant findings from the present research was related to the multifaceted nature of trauma in the lives of police officers coming from two different cultures. It was observed that trauma is

not predominantly determined by the event related factors (such as the content itself). Trauma was mutually defined as a presence of unpleasant feelings caused by direct or indirect contact with emotionally charging stimuli/situation. Significant factors determining the traumatic/emotional impact were found to be the sensitive elements attached to the event (mainly determined by cultural or religious assumptions), performance pressures. Given the fact that the nature of disasters and challenges is different in the two countries, some global and individual experiences were generated by the findings.

Trauma experience is highly relative due to personal association and interpretation of the events concerned and the dominant cultural factors besides demographic variation yet two broad boundaries were defined from the present research. The research suggested that trauma in the workplace might not be event related but could possibly be a result of some discomfort resulting from an unfriendly workplace atmosphere. Some of the traumatic experiences were unique to the Pakistani culture, such as sexual harassment in the workplace was a big issue for female police officers and quite interestingly, the harassment was carried out by dominant and powerful female senior employees. In Pakistan, females are one of those underprivileged groups who are subject to discrimination due to their “expected female roles<sup>36</sup>”. Since females are brought up in that culture, they are more inclined to carry out the similar practice on the next generation when they are provided with the opportunity. This could possibly explain why most of the harassment comes from the females themselves. Males, on the other hand, reported socially desirable responses suggesting that everything for them was perfectly fine, contrary to what the researcher observed in face to face interviews. This discrepancy indicates an important aspect of professional performance pressure and heightened anxiety and alertness due to this issue.

There are other reasons which might explain this tendency, for example: professional jealousy, insecurity, distrust and unhealthy workplace relationships, or personal discords, and most importantly the favouritism. This aspect needs to be explored further. The findings corresponding to the first research question showed that trauma is a subjective experience resulting mainly from the way individuals interpret according to their cultural beliefs. The trauma experiences were the day to day police work related encounters

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<sup>36</sup> In Pakistani culture, a female has a role of looking after the family while male is the breadwinner and works outside the house for an earning.

involving emotive components such as human disgrace, moral or ethical breaches, those involving women were considered a case of honour, the children and young cases.

### 10.2 Dimensions of psychological trauma

In police work, working in traumatic conditions has several psychological implications (both positive and negative) which affect different areas of psychosocial functioning of an individual. The findings revealed that cognitions played an important part in determining the psychological impact of the traumatic experience.

### 10.3 Role of Spiritual Healing Practices in coping under pressure

The present research' findings revealed that religious affirmations played a pivotal role in surviving the psychological pressures, especially in Pakistan where Islam is a predominant religion (Binder, 1963). In Islam, the spiritual beliefs provide great insight about how to deal with such experiences (Farooqi, 2006), while police in England reported other similar life beliefs (positive affirmations) and resources which were helpful in being realistic and professional. Nonetheless, respondents acknowledged the emotional impact of working in such circumstances. The anecdotal evidences that not only reflected the variety of trauma experiences transformed them as an individual, but also described how scarce recourses can be used for coping or adaptation. In Pakistan, where basic logistic facilities are lacking, the only resource available for psychological comfort was parents or family/friends. This group of supporters provided moral encouragement and instilled the will/motivation to keep struggling for a transformed better individual. For the police in England, there was a variety of resources compatible with modernised crime and challenges. They have facilities to consult their occupational health provider besides engaging in self-help healthy strategies such as socialization or other hobbies.

### 10.4 Psychological Resilience and Mental Robustness

Literature suggests that psychological resilience contributes towards improving efficiency and overall mental robustness (Friedli, 2009). It is further suggested that resilience can contribute to increase efficiency and performance in police organizations. Psychological resilience is the ability of a person to bounce back from the stressful situation, or ability to come back to normal activities after a shortfall (Hollnagel, et al., 2006). This was termed as a most helpful tool while dealing with difficult situations in police work. The statistical analysis showed a significant difference between both sample groups over resilience and

related variables. It further identified positive indicators of resilience, which might be helpful for the intervention planners.

There are a number of factors that may explain the discrepancy between the resilience scores of the two countries. Firstly, the nature of hazards and trauma experiences and their severity is different. Pakistan is facing an elongated threat of war on terror. The police outnumber the citizens and most of them are deployed for the VIP's which adds to their pressure of performance. In the UK, the availability of resources to meet work related demands and arrangement of post trauma care helps to build resilience. According to Hassan Abbas, the reduced number of personnel and weapons are an increased source of insecurity amongst law enforcement personnel, because once they will not be able to fight or stop crime, they will not be satisfied with the Job or their responsibilities (Abbas, 2011)

As hypothesised, resilience and mental health of police officers in England was relatively better than the ones in Pakistan (table 7-20). This can be understood because of the nature of traumatic experiences and exposures in the two countries. Pakistan's overall deteriorating law and order situation and targeted attacks on police, have affected the morale and satisfaction of personnel. Some problems were highlighted in the present research. Such as increasing "performance culture" was a source of stress for both police forces. The present research findings revealed that although performance culture has been formulated as a best practice for the force, it is nothing but another source of stress for the police. The increase pressure to come to work despite a mental inadequacy or discomfort is another area to look at.

The predictors identified in this research include trauma exposure frequency and its impact (these results need to be dealt with caution), mental health, physical injuries, psychological consultation, religious orientation/influence and physical injuries. Some of these predictors corroborate with earlier studies that showed the link between having adequate coping strategy, and mental fitness with resilience (Bates et al., 2010). Police officers with less years of service were comparatively more resilient than the officers with more service experience (Table 7-21). This could possibly be because aging may be accompanied with illness or loneliness (Hawkley & Cacioppo, 2007). For the younger recruits, their motivation and awareness or being mindful (Williams, Ciarrochi, & Deane, 2010) could be a factor explaining their high resilience. Another striking finding is that police officers in England reported having experienced more numbers of physical injuries as compared to

those by Pakistanis (table 7:24-25) whilst physical injuries predicted an influence on resilience to some extent. This might be possible because in England the rate of accidents has increased due to multiple factors such as excessive drinking (Radun, Ohisalo, Radun, & Kecklund, 2011).

These results signify that trauma can be better understood if cultural factors are taken into account. As the findings clearly revealed, the culturally defined practices of dealing with adversities (such as spiritual healing, hobbies, family cohesions, religion etc.) explain how personnel beat their psychological problems in the midst of other unresolved issues. There is an immense need to extend such basic psychological evaluation particularly in Pakistan, where mental health related risks are exceeding with each arising dispute in the country. The situation in Pakistan demands a more resilient police force, which is psychological fit to be able to execute its duties for public safety and protection. Police in England can benefit from understanding the ethnic diversity of its force personnel and how different plans can incorporate cultural values and beliefs.

#### *Traumatic Experiences and police "Job"*

It is quite likely that the Police will experience a wide array of traumatic incidents throughout the course of their professional lives such as physical assault and motor vehicle accidents while pursuing criminals, and viewing victims of sudden death. The importance of exposure to traumatic incidents is more critical when considering mental health check measures for officers on patrol or duties on sensitive posts. Given the reality that police work comes with risks and threats, the risks to vulnerability ratio in this profession is profoundly high. The combination of qualitative/quantitative approaches helped to extract the exact nature of trauma in police work related tasks, how they are manifested in the psychological world of an officer's mind, and it also helped to explain how gender and cultural variations play a role in emotional display and control.

The discussion chapter is segmented into four primary parts. It begins with discussing what emotional triggers are possibly generated by mere encounters with the traumatic events. It furthers the debate as to whether emotions are acknowledged, if so, then to what extent the way emotions are handled. This part proposes a trauma metabolic model to explain the process of trauma reaction and response and how it contributes towards the overall resilience.

The second part of this chapter provides discussion about the quantitative analysis. The focus of this discussion is to identify the challenges towards coping and identification of factors which can enhance resilience in officers involved in trauma or relief work.

The third segment of the discussion chapter provides information about another, but related dimension i.e., Psychological Support and challenges. This section was included in the survey to get baseline information about the state and perception/meaning of support in both countries forces. Responses are compared between both forces to obtain the trend of psychological support seeking behaviour.

Throughout the discussion, comparative analysis is made to see a difference, if any, between, a) gender b) service duration c) nationalities on all research scale variables.

The discussion chapter amplifies the findings with updated the research in the field to examine the results of the present research with other similar researches. The research aim was to examine a cross national display of emotional reactions when confronted with trauma, and coping means adopted.

#### 10.5 Type of traumatic events: Emotional Triggers

This research identified a broad range of events, which were of emotional value and concern to the participants working in a situation involving threat or disgust. Most of the officers who responded to the survey were able to recall incidents and experiences quite clearly dating as far back as ten years. Even though the events had occurred over a longer span of time, the descriptions and stories were quite detailed, vivid and contained the extent of an emotional component. As figure 7:9 suggested, the most commonly occurring traumatic experience was deemed as media interference and violent riots. This could be related to the massive increase in police critique over their crowd handling tendencies – referring specifically to the London Riots (Potgieter, 2011). The situation is more critical in Pakistan where the police ability to handle aggressive crowds is highly criticised (Abbas, 2011). This research suggested that the aggressive crowd can be a greater stressor and the pressure to control and monitor places than in an ambiguous and difficult situation to execute orders.

Some other emotive traumatic experiences included handling cases related to children, adults, death of a close colleague, attending someone dying, etc. The traumatic experiences identified by the present research were wide and not limited to the person concerned. Two

basic types of trauma experiences were suggested. Those limited to personal grief, and others which were shared at Organisational or universal level.

### *Personal Grief*

The first theme of traumatic events was direct exposures to the incidents where the officer was directly involved into and the resulting emotional pain being unshared or addressed. These include investigations, testing, handling bodies, or body parts, witnessing, smell and taste or vision. The comparison of the responses from both the countries forces showed that the Pakistani police officers rated media criticism and riots as most traumatic while child cases and other were related by the British police officers. Other than that, a similar threatening event checklist was generated as displayed in table one. These included child related cases, female cases, rapes and assaults, accidents of close friends and dealing with families. Moreover, the findings strongly suggested that media involvement and pressure from organizations or political forces was a major stressor. Findings revealed that exposure to events had an immense impact especially for those personnel who had greater exposure rate (see table 7:3). The literature corroborates these findings suggesting that large coverage by the media is a strong stressor in police work (Hickman, et al., 2011).

Some of the stress comes from the personal issues related to family, as most of the officers have to spend a maximum time away from families, the relationship issues can create worst problems for the officer if s\he is experiencing a hard life on the field or on duty.

The reason why media criticism is considered as highly traumatic rather than the actual crime related investigation, might be that the public image of the force in the country is highly critical. In Pakistan, for example, the police in all divisions and regions are famous for their corrupt role. Very few (and often lower ranked) officers, who are honest, cannot exercise their freedom of speech due to high politics in the force. This is a rising concern among the employees of the force and is an increasing cause of dissatisfaction with the work. According to one of the reports by Fasihuddin, an increasing number of police are leaving the force because of the threats to their own safety and apathy in behaviour from police authorities (Fasihuddin, 2009b). Hassan Abbas, in his country profile reports, has suggested the poor situation of the Punjab police on many occasions (Abbas, 2011). The number of personnel to the population ratio is very low and in addition, a wide number of personnel are deputed to positions to protect the VIPs. This concern was considered as highly unpleasant (Abbas, 2007).

For the British police officers, however, the riots and handling the crowds was a rather unpleasant experience, and dealing with the families of the victims was highlighted. This could be because the counselling of the families is a critical and sensitive area and not all officers are trained as counsellors to handle the emotional pain and frustration of the victim families. The similar issue was raised by Pakistani participants who questioned the witnesses consent to evidence against crime as a major problem.

### *Organisational and Political Stressors*

The second type of events that were possibly stressful and unpleasant was ones involving Organisational hazards. One of the overwhelming concerns was the fear of black mark<sup>37</sup>. A significant number of responses emerged to strengthen the view that the police work is more like pleasing business, where the personal morality has no place. Most of the officers, especially from Pakistan, were reluctant to admit any fallacies present in the system despite the realistic evidences and commentaries.

### 10.6 Relationship between the type of events and their psychological impact

Scores indicated a direct relationship between the two suggesting that a high number of exposures are related to a greater psychological discomfort. Moreover, cross national differences suggested that the exposure rate for the Pakistani police officers was greater than the British police officers and their psychological discomfort was relatively high. Relating these findings to the scores on mental health, there was not much difference in the mental health scores. Thus it can be concluded that the exposure to trauma is directly proportional to the psychological impact.

Prior research confirms this evidence. For example, in his book “Psychological Aftermath of Police Work”, Vincent describes the police death encounters and how they affect/define the psychological world of a policeman/woman (Vincent, 2004). Carlier and colleagues (Carlier, et al., 2000) have described trauma as a multidimensional concept where individual differences play a pivotal role.

Messing (1991) has identified five types of hazards which these police officers are exposed to. These include physical (such as cardiovascular disease), chemical (such as air pollution), biological (such as communicable diseases), ergonomic (such as back pain, stress) and psychological (such as depression).

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<sup>37</sup> Fear of being held accountable for, or fear about having some impact on service record.

According to Brown and Langan (2001), the work related situations that pose the greatest threat of homicide for police officers include responding to disturbance calls and arrest situations, accounting for 16 % and 39 % of homicides respectively between 1976 and 1998

### *Physical Injuries and Mental Health*

One of the astonishing findings was that the injury rate was reported to be high in the British police officers (see table 7-25). This could be because the accident related deaths are quite high in the UK (Andersson & Chapman, 2011).

### *Climatic conditions*

The qualitative findings indicated that for Pakistani police offices, the climatic conditions had strong influence on mood issues, and their emotional control. Findings from the literature also suggest the influence of climate on mood and behaviour (Sharma & Sharma, 2011).

## 10.7 Means of Coping and Support

For police officers from both countries, the support was mainly sufficed by the family or close friends. Some of the themes from this analysis are as follows:

### *Prepared for the worse*

In terms of police work, the stress involved accounts for the need for reflective measures to ensure the mental readiness and stability of its employees. Though the situation of crime, terror and instability is different in the two countries, coping with stressors was quite similar in terms of the use of faith or religion, and external resources. Almost 85% of the research sample agreed to seek a psychologist/psychiatrist support lest it is not the force. There was increasing reluctance to go to the force occupational therapist due to fear of a black mark. This aspect was observed in the response of both samples.

As assumed, the two samples differed in their scores on the resilience and trauma scales suggesting that the type of exposure is related to the amount of impact and therefore resilience. British police were relatively more resilient. Some of the factors appearing to be associated with resilience included, past history of illness, psychological consultation trend, debriefing, mental health status, physical injuries and coping (internal and external).

Reflecting on the means of coping or support, the results corroborate with earlier findings, which suggest that developing societies have resilient tendencies emerging due to the hazards they face. No matter how limited the resources may be, forces have capability to utilise them optimally. Unfortunately, the Pakistani forces suffer from far more criticism which demoralizes the efforts to survive the psychological battle. This might be the reason why the forces are not more vigilant or resilient in fighting crimes or doing regular duties.

Consistent with the findings of Vincent, exposure to near death situations may provoke anxiety and can have long term psychological implications. The present findings support previous research, which suggests that mostly the officers' focus on details of the event in which they interacted or were involved (Peres, et al., 2011; Pineles, et al., 2012). The vivid and clear memory of the event might be a sign of how the event was registered or processed.

#### 10.8 Nature of experiences

Findings showed that the experiences referred as traumatic were those involving a degree of emotional connectedness and unpleasantness. Cot deaths were frequently mentioned by the British Police forces and the resemblance with the officer's own child was also there

Responses suggested that exposure to a variety of stimulus can be stressful and unpleasant depending upon three factors. A) The nature of the officer's contacts b) the perceived meaning of the event c) the emotional component or sensitivity. This further suggested that when an officer experiences traumatic events, they may undergo physical as well as psychological changes or transformations. One of the major alterations in their personality was changes to the belief system by either the strengthening of it, or weak beliefs. In either way, the belief system governed the way the traumatic incident will be perceived and processed.

Violanti (2004) has done immense work with the police and has suggested on numerous occasions, the effects of working in traumatic situations. His findings ascertain the current research findings, where the participants found out the events such as taking part in shootings, child abuse cases as most traumatic and stressful (Gersons, 1989). One of the main traumatic factors was the time urgency or need to carry out the investigation in a limited time with increased pressure of performance. Quite likely the emotional side of the event gets dispersed.

### *Type I: Primary Experiences*

These experiences were the ones involving direct contact with the stimuli such as near death experiences and rape cases

Type 2: These include other stressors and experiences such as performance pressure, time urgency and Organisational conflicts

Narrative studies exploring trauma stories identify two basic categories of traumatic events i.e., those which had direct influence on the victim and the others indirect exposures, such as hearing grief/loss of others or empathizing others.

### *The Emotional Triggers*

The thesis identified several emotional components of trauma related events. These emotional triggers can be divided into three broad categories as follows:

#### *Personal*

Personal factors included recent history of a similar grief or loss, attachment or reminder, knowledge about the person dying, history of illness, type of contact, and extent of contact. These personal factors appeared to be responsible for triggering emotional reactions as described by the presence of unpleasant feelings beyond control. The emotional reaction to events is a symbol of the constant on-going struggle with the psychological consequences of operational duties. As revealed by the previous literature, emotional reactions represent the degree of impact. Such a conversion of simple stress or anxiety into panic attacks or even depression can signify the intensity of damage occurred over a period of time.

#### *Organizational*

Organisational triggers included workplace relationships, fallacies and delays, shortage of equipment or criticism.

#### *Contextual*

The emotional trigger can be contextual. For example, the officers' emotional experience may be a consequence of someone's reaction i.e., vicarious traumatization, or specific to how it is perceived or apprehended.

### *The Emotional Reactions*

The findings suggested strong emotional reactions associated with working in traumatic situations. These included feelings of fear, insecurity, danger, self-worthlessness, disbelief, disorientation or confusion.

### 10.9 The Impact of trauma experience

One of the first inquiries for the present research was to explore the nature of trauma/emotional experiences in the lives of police officers'. It was expected that personnel responses would reveal their perception about how and why a situation/event/or a stimuli was considered painful/traumatic or threatening. A list of events was devised from the pre-study interview themes. It appeared that the most powerful emotional trigger was association or symbolisation or attaching a meaningful context to the event. As evidenced by some of the literature in the past, the symbolization of events acts as a defence mechanism towards coping with psychological affects and may possibly explain the extent to which the damage has been caused. Some contextual factors such as how a female case is seen or tabooed, is another way of looking at it. In Pakistan, for example, female victims are considered as a case of honour where the treatment plan for them also varies.

### *The physiological Impact*

As indicated in the anecdotes, psychosomatic affects included panic attacks, shock, numbness, vomiting or disgust, nausea, chest pain, etc. these sudden onsets of responses can be adrenaline affect, or could also be explained by the fight and flight theory. It is quite likely that the person exposed to a disgraceful content will feel himself/herself suffocated and disgusted (Tehrani, 2010). In most of the occasions, direct contact worsens the severity of how it would be remembered. Other than these, some of the participants shared their diagnosis of clinical conditions such as those of depression or even PTSD.

### *The Psychological Impact*

The analysis indicated that the majority of personnel were deeply affected emotionally. There was a constant overwhelming state of worry and anxiety especially about fears and apprehensions about their own safety and survival.

The impact of the traumatic events was determined by two sources, i.e., the frequency of exposure to a list of events, and their respective psychological impact. The qualitative narration of responses helped to further the information about how these working conditions influence their capability to fight and cope. Another check for the impact was mental health scores as obtained on the GHQ. The findings identified a wide range of highly emotive events and situations which had a detrimental impact on the psychological wellbeing of these officers.

The anecdotal evidences suggested a wide range of emotional/psychological reactions such as being inundated by traumatic memories, stressful, pain and disgust, helplessness and worthlessness, behavioural problems such as anger, resentment, poor sleep or appetite. The response to GHQ suggested that the majority of participants had adequate mental health and resiliency. However, the anecdotal records revealed the context in which the emotions that were more elaborative rather than the cumulative scores. The respondents were rather expressive and detailed in their responses.

These findings corroborate with earlier studies which suggest that typical emotional reactions following a traumatic incident exposure in police officers may include pain, stress, depression, disgust, helplessness and inadequacy (Bakker & Heuven, 2006). One explanation for the feeling of worthlessness and inadequacy might be due to the pressure from authorities to perform well which most often undermines or suppresses the need to address emotional conflicts (reference needed). In Pakistan, the law and order condition is worse and the police are under immense pressure to perform role duties well. Since following terror attacks and the Sri Lankan team incident, the police were very cautious about revealing their personal deficiencies and anxieties and this might reflect the validity of some of their responses on GHQ and Resilience scales.

The most common emotive experience was dealing with vulnerable population including young children, women and those badly injured.

Besides this, the analysis indicated that near death experiences, death of colleagues/friends at workplace, dealing with psychologically disturbed families, incidents at public/religious places, disturbing content during investigations and public riots were considered highly distressful.

A traumatic event was described as any unpleasant experience which was sensitive and whose emotional/psychological experiences were painful and beyond control. These unpleasant experiences can be divided into three broad categories. A) Personal: Events which had association with a person's life/own family b) Organizational: Events which involved Organisational fallacies or disturbances c) Public Related

The research identified a distinct theme of performance culture. The responses indicated high distress levels due to performance related pressure and on call duties.

#### 10.10 Performance Culture and Resilience Needs

The findings revealed that an increase emphasis on performance culture imparts additional pressure and may undermine their resilient tendencies. As revealed by a number of responses from both countries, the global increase in the threat was predominantly responsible for the accelerating tension in their behaviour and performances.

#### Means of Coping

The findings suggested that the respondents acquire a wide range of coping strategies and skills depending upon personal grooming skills and available resources. It appeared that the British police relied more on the internal resources such as seeking self-help etc. The most common source of seeking help for British police officers was family and close friends. The most helpful belief was faith and religion especially for Pakistani police officers (attachment with God). Most of their emotional reactions were grounded in the religious practices and beliefs.

Research findings showed that the internal resources were an easier source of coping. These referred to self-help skills and were directly associated with individual awareness about psychological health and fitness. External resources such as seeking professional psychological support were differently perceived in both countries. This might be because of organisational climate and availability of resources/type of resources.

#### *Psychological Robustness Seeking MH Support*

MANOVA and Regression analysis revealed that a number of factors were directly associated with psychological robustness i.e., resilience. These included past history of illness or exposure, mental health status and physical injuries.

As discussed in the literature, a large number of personnel report work related stress at some point in their work lives. The psychological complaints can be personal or professional. One of the research questions was to explore whether there was any history of psychological consultation among participants. Responses showed that a small number of police officers sought psychological services (see table 8:2) even though a comparatively larger number of personnel felt the need at some point in their lives (see table 8:3). Anecdotal evidence revealed that the majority of the British police officers consulted psychological services for complaints such as depression, PTSD, behavioural problems such as bullying, panic and other personal concerns. The responses from the Pakistani police were limited, but revealed that few of the officers consulted a psychological expert due to family problems and work related bullying issues.

In countries such as Pakistan, the mental health concerns are seldom discussed with a professional. Most of the time, people tend to discuss their problems or issues with close family members or friends (Karim, et al., 2004). In Pakistani culture, parents have a high respect and care and are the first point of contact when in stress. Since most families are joint (parents live with their families), parents are a primary source of help when it comes to trauma or any other difficulty. In other cases, spouse support, children and close friends are immediate help points.

Research evidence supports the finding that when suffering from trauma, police personnel tend to seek social support which helps them to cope and come out of difficult times (Turner, 2012). Social support helps to reduce the strains experienced in day to day work, it may also alleviate perceived stressors (Viswesvaran, et al., 1999). Much of the intervention programs now render greater emphasis on including social support groups (such as those included by the Metropolitan Police Force (Summerfield, 2011).

The second research question was related to a mental health awareness and resources consultation. Responses showed that a small number of participants had attended mental health courses or critical incident stress briefings (see table 7-1). In West Yorkshire police (UK), debriefing programs have been stopped due to their lack of productivity and use. According to the force psychological expert, these debriefings were of little value in comparison to face to face counselling services, therefore stopped (anecdotal evidence). In Pakistan, very few officers consult their managers and discuss about the debriefings due to fear of being evaluated. However, they agreed that speaking to managers and sharing

problems, concerns or achievements can be very helpful in boosting morale if seniors are supportive and unbiased. For this reason, although the majority of Pakistani police personnel suggested seeking managerial support, such discussion was deemed risky.

These results are not surprising in the police culture (the set of rules and regulations related to police work); the police role renders several barriers for police personnel when it comes to seeking support. As indicated in the findings of Vincent (Vincent, 2004), police officers may want to remain in the good books and hesitate in officially reporting their psychological injuries. Those who do report are accused of false claims and sick leaves/absentees.

These findings are critical in understanding the mental health care related situation in both countries. Whilst the support facilities are readily available in the UK, the lack of trust over force psychologists' performance culture as evidenced by their anecdotal responses, is still a big concern. For Pakistani personnel, a lack of proper facilities in addition to having no awareness about mental health care can have a devastating effect. The effectiveness and credibility of psychological services is still a question when the existing conflicts remain unresolved (for example personnel security and safety measures). The mental health of personnel is a big issue especially under conditions of poverty, corruption, poignant work conditions and trust, poor supervision and support. Police authorities need to understand the importance of mental health support for its employees.

Although seeking psychological support is voluntary, the force needs to arrange proper intervention or arrangement for not only those who have suffered, but also to prepare those who are at potential risk. This can be done by including mental health awareness programs, workshops, activities etc. Inappropriate priorities (such as increasing salaries and money prizes and overlooking root causes or problems such as supervisor conflicts) and inappropriate targeting of programmes (not personnel friendly, rather Organisational friendly, performance focused) are not the only problems for Pakistan (and the UK) police. The Pakistani police have challenge of can consider psychological services. The profession of counselling and psychological services is in its embryonic stage. The psychologists are emerging in the field and can offer considerable help if understood and accepted. Although fulfilling the logistic barriers in a short time might be unrealistic, encouraging and supporting staff by the supervisors can also mediate. As the anecdotal responses showed, supervisors and senior colleagues can play a crucial role for the mental health of its staff.

Similarly the senior staff can consult professional support besides the trend of seeking family /friend help (which is always useful). The paper also suggests interventions related to pre and post trauma care. This includes, being aware of trauma effects, risks and vulnerabilities, knowing personal traits (strengths and weaknesses), appreciating and rewarding achievements, cohesion between personnel from all ranks and colours etc. Intervention plans must be holistic, seek cooperation from all resources, and be sensitive to gender, culture and context.

#### 10.11 Cross national diversities

The cross national analysis indicated that there was much similarity in responses to the emotional experiences in police work. Some cultural and social beliefs were prevalent in terms of considering the sensitivity related to events. For example, child abuse cases and female cases were considered as a matter of honour and humiliation and were therefore more disturbing than any other. Quite interestingly, the attitude of police officers towards female crimes and female victims was sarcastic. It appeared that the female cases were most difficult to deal with.

In terms of coping, the Pakistani police personnel appeared to rely heavily on religious practices and affirmations. The British police on the other hand, were moderately religious. Their coping was more self-help based. Most of the participants suggested that they might go to the private psychologist instead of the Organisational occupational health service provider due to fear of a black mark. The Pakistani police officers, on the other hand, were more oriented towards speaking to family, especially elder parents, or spending time with the family. This theme was common in both police forces.

Results also indicated that most of the personnel were mentally fit and had adequate functioning. The differences between Pakistani and British police were not significantly different (See tables 7-13). The research findings revealed a significant impact of witnessing or experiencing trauma in the workplace. This was evident from the results correlational analysis and regression analysis results. These findings corroborate with earlier studies which show that the greater the number of exposed experiences, the poorer the mental health or resilience (Weiss, et al., 2010).

The findings further showed a variety of cultural and religious factors involved in expressing trauma. It appeared that the participants were generally moderate religiously

and their understanding about life events determined how well they perceive these events and respond. Particularly these differences were clear between Pakistani and British police officers.

One of the significant findings relates to understanding significance of culture in practising coping approaches. As revealed, religion and faith were important factors towards the path of healing. Punjab police is a densely Muslim population. One of the cultural aspects is “general dissatisfaction and distrust in police by the public” and their corruption and abusive behaviour charges. As most of the news reports confirm, the persistent threat of being evaluated or assessed by the public not only causes stress but provokes these personnel into engaging into unhealthy and unacceptable behaviours. One of the reasons by criminologists in the field suggests that the increased corruption is caused by low salaries and a lack of cohesive environment within policing. Officers themselves become criminals as if taking revenge on the society.

The scarcity of data about police in Pakistan was a big hurdle in the present research. The investigator had to rely mainly upon the internet resources and newspaper stories. Some officials were contacted to get some information about the police. The role of religion in overcoming day to day stress is one of the significant findings in the present research. Some findings, not particularly in policing though, do suggest the role of practising religions affirmations in coping from upsetting situations. In the Muslim religion, various “aya” (Quranic verses/statements) suggest the benefits of patience in adversity. Adversity or difficulty is taken as a trial in Muslim society, and the Muslim community is asked to observe patience and perseverance. Another concept is the “reward in Jannah” i.e., rewards for the worlds here after (i.e., heaven) which motivates them to do well and be patient in difficult and pressing situations. For example:

*S<sup>38</sup>2 V<sup>39</sup>153: O ye who believe! Seek help with patient perseverance & prayer: for Allah is with those who patiently persevere!*

*S2 V45: Seek Allah's help with patient perseverance*

*S3 V 200: O ye who believe! Persevere in patience & constancy: vie in such perseverance: strengthen each other; and fear Allah that ye may prosper*

*S11 V 115: .and be steadfast in patience*

*S7 V 128: Said Moses to his people Pray for help from Allah and (wait) in patience and constancy*

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<sup>38</sup> Sura number

<sup>39</sup> Verse number

The reason why psychological counselling is a difficult concept to adhere to is because it is considered a western phenomenon and secondly the expression of emotions is considered as a symbol of lack of belief or weakness in one's faith.

These references suggest a strong role played by religious teachings and the majority of Pakistani police officers mentioned practising these affirmations in day to day life. The western literature about how religious teachings play its role in trauma, suggest that this is a new way of looking at it in policing. It appears that there is no optimistic hope for improvement in the police in general. However for Muslims, these events become a source of more closeness to their religion and it becomes stronger.

The findings suggested differences in response to trauma, resilience and coping related challenges and strengths. The research attempted to bring in the vision of how Pakistani police are fighting with its resilience related issues within limited resources. By comparing these responses to that of the British police force, it was revealed that the culture has a significant role in shaping how to react and produce a response. Although the resources were not the same, the religious practises were acknowledged as being important.

The calamities confronting the Pakistan police, nature of threats and other problems reflect how much they have been affected by the external shocks placed by the work related duties and pressures. This research exposes the nature of vulnerability towards psychological disturbances by talking about the conflicts and nature of expectations and pressures, and recent performances as indicators. The research findings suggest that despite of all these external or internal pressures, police are resilient and optimistic about their role and responsibilities as well as personal health.

#### 10.12 Resilience and Mental Health: Psychological Robustness

The British police officers were more resilient, had less trauma exposure and had better mental health than the Pakistani police. These results are unsurprising considering the mental health related resources available to the police in UK.

Female police officers were more resilient and more emotionally tolerant than their male counterparts. This was evidenced by one of the research findings indicated in table 7-16. It appeared that the females have strong emotional control and management as compared to males. One of the possible explanations could be the nature of deputation and tasks they

are involved in. as in both country police forces, females were responsible for low risk tasks such as patrolling, traffic control and managing office tasks in most of the cases, and they are not equipped with weapons. Few research evidences also provide explanation for this association. Most of the studies carried out on benefits of diversity in law enforcement have appreciated the usefulness of including females because they are more resilient and tolerant. The literature suggests that women are less likely to experience police brutality and they can better handle cases of violence against women which are increasing at a rapid pace (Thomas, 2011). Scientific evidence indicates that women are better in wearing off the PTSD affects (Khan, 2011). This could be possible because women are exposed to less violent stimuli than men and also because women tend to solve the matters by communication rather than physical violence (Joan 2009).

In this research, duration of service appeared to have a significant main effect on resilience as well as wellbeing scores. As indicated in the figures 7:3-4, officers belonging to the upper and lower service duration range had the highest impact of trauma and had experienced the severe psychological implications. Moreover, the analysis of resilience and wellbeing showed similar variations. This difference might be due to the nature of work allocated to personnel when they are freshly inducted (the recruits) and the senior police officers. The increase of stress may be perceived because although the young cadets may join the profession with enthusiasm and motivation, the nature of challenges is quite spontaneous in the beginning. Another reason could be the accommodation, perhaps the officers are not well adjusted to the new police culture. Similarly, the senior police personnel who are mostly performing supervisory or paper work are also affected with trauma probably due to the monotony and nature of their role. Nonetheless, the police literature corroborates with these findings. Conclusion

This research project explored how police personnel deal with unpleasant and traumatic work related circumstances and experiences by looking at their trauma stories and associated reactions-responses. The use of anecdotal accounts supplemented the findings from the survey by corroborating with each other. A mixed methodological strategy was used for data collection and the grounded theory paradigm was followed throughout this research. Premises being that the research findings will form the conceptual framework. The early interviews with experts and various other sources helped to propose a trauma metabolism model whose basic premises is that the psychological effects of the trauma are processed subconsciously depending upon the social wiring of the individual. This model

illustrates the role of conscious and unconscious efforts involved in choosing coping strategies and states that the success of any coping mechanism depends upon its conscious realization and effort involved. It also argues that the resources available might not matter as much as the awareness about the issues and disturbing emotions. The recognition itself helps to control emotions and direct them in desirable and effective way.

The research provided local context to the findings by studying the social system involved in the coping mechanisms and also briefly looked at the police culture in the two countries. The findings indicated a wide range of individual differences in expression of trauma in traumatic experiences, their appraisal and coping ways. There were several issues raised in this thesis. Foremost being the need to expand and facilitate the performance culture. Performance culture, as reflected in the previous chapter, acts as a major contribute to improving the workforce environment. Study findings showed that the unmanaged pressure to perform without taking into account the perspective of officers is completely blinded. It might be helpful to explore how officers perceive the performance culture so that the policy can be more representative.

Another issue related to the trauma experience was resilience variation across service tenure. It was observed that the senior police personnel are comparatively less resilient and probably more stressed. This could imply that there is a need to have more adherence or mixing of senior police personnel with the junior. There is a set boundary between senior and junior police officers and not all are selected going through the rank structures.

Cross national comparison was extremely useful in identifying variations in trauma reactions and response and it helped to formulate a rather well integrated and representative model. The validity of the model was established in two ways. The anecdotal accounts were validated by going back to the experts interviewed at the initial stage and verifying the suitability of the model and obtain their opinion about this. The second way was statistical analysis using path analysis and regression analysis of the hypothesis. It was postulated that there might be gender, nationality, service wise, and rank wise differences across resilience, wellbeing, coping resources and reactions management. The differences were obvious at service, nationality but not very significant across culture.

The observation and analysis made in this thesis is based on responses from both genders although the sample size may not be comparable. This gives a holistic view of coping and perception.

Another important issue is about female challenges towards coping. This needs to be investigated in detail since policing is predominantly a male profession. The challenges for females to cope are unique and different to be realised by male dominant authorities. The policy needs to take account of gender variation in coping skills (Since females cope in a different manner than the males).

### 10.13 How to foster Positive Growth?

A major implication of this research is its emphasis on studying the strengths of struggles instead of the blind focus on the negative aspects. Analysing how adversity contributes and transforms the individual into a better individual may be a helpful strategy to understand the psychological world of police life. An important contribution of this research is the need for recognition of the efforts made in positive growth in the consistent war of adversity. This can be achieved by rewards, or promotion. In developing countries such as Pakistan, the recruitment is highly corrupted and not on merit. This influences the hopes and aspirations of those who want betterment of the system. The efforts of an honest need to be recognised and that culprit need to be held responsible.

### Role of Police Culture

A police culture is important and is mostly taken in negative connotations. This research presents another view of looking at the police culture. The culture of police is developed based on norms and practices of this sub society which is separated and distinct from the rest. The police culture is an important component of policing as it provides the identity and recognition but on the same note, there are some negatives and misuse of policies and practices which contaminates the main aim of the culture. The police culture is very much influenced by the power system prevailing in the society. The dominant practices of injustice can be seen in the culture itself. Therefore the psychology of police culture, its usefulness and how it can be improved needs further exploration. The findings of this research give a strong indication that there is an increasing disparity between subclasses within the police ranks. For example, the roles and responsibilities of lower rank officials are quite different and their challenges and problems need to be recognised at different

levels. It was also observed that there was little coordination between different groups within the police.

Who is a resilient police officer?

The resilient officer is the one who duly understands his/her own emotions associated with experiences and understands how to control and manage them and use them intellectually. This aspect of trauma recovery needs further exploration. Although the research oriented towards emotional intelligence in police officers duly acknowledges the importance of reading emotions and understanding them. The need to have further understanding about the role of emotions in trauma recovery needs to be made. A comprehensive corpus of literature has explored the nature of work and its impact on mental health, suggesting that people who are in constant exposure to trauma (such as police, military personnel, ambulance workers etc.) are at a high risk of psychosocial problems as compared to others. This type of interaction undermines their physical and mental well-being which further affects how they cope and resist with such psychological consequences (i.e., resilience). There is a gap of understanding about how cultural/social/religious beliefs shape the emotional reactions and coping process in the police setting specially in developing countries such as Pakistan. Considering the nature of trauma exposure and risks involved in police work, the present research compares anecdotal accounts of work related trauma experiences of Punjab (Pakistan) and West Yorkshire (England) Police forces' aiming at extending understanding about trauma reaction in police officers in a cultural context.

The gap of communication or the divide should be reduced. There seems to be a lack of understanding in these groups which causes tensions to bridge rather than reduce.

The demand and resources utilisation theory is useful in policing context but not in the welfare of the individuals.

Gender and Coping from trauma

Previous research documents the individual differences on the basis of gender, however in terms of policing the need is to be acknowledged more. Female responses to trauma perception and response is slightly different to that of men. Although this research did not find much difference in appraisal of the trauma itself, the circumstances associated or confronted by females are feminist and must be treated accordingly. For example, a female

police officer mentioned her concern about contracting disease since she herself was pregnant and was on duty. These kinds of stressors must have arrangement separately.

For men, the trauma was mostly related to the specific managerial concerns while the females chose the emotive aspects of the incidents as being more stressful. This cannot be evidenced based on the number of sample but this much evidence justifies further investigation into gender related responses.

The culture plays an important role in gender variations. In Pakistani culture, a female police officer is not an acceptable role, whereby female police officers are not looked at pleasantly. Although many females tend to join the police because they are unmarried and want to have their own safety and security, they feel quite threatened and harassed by the authorities in the local stations. Not only do they perform a different nature of duties, their roles are confined within certain rules and this does not allow them freedom to exercise duties. Furthermore a lack of merit and use of bribes is extremely common which demoralises those who are honest. Both internal organisational atmosphere and external work environment are less favourable towards females.

Although the research did not look into gender variations in the coping or resilience strategies in particular, female police officers were comparatively less resilient than male officers and appear to resolve their traumas based on emotion focus strategies which correlate to previous similar researches. These gender differences do not moderate to place an effect on resilience; however, anecdotal evidences reveal a number of challenges across gender especially in Pakistan. Concern about the impact of traumatic experiences in female police officers needs to be given more attention because female policing is a growing area and although the present number is limited, increase a need to recruit more females is being felt. So their problems and concerns need to be identified and solved being in a male dominant culture.

#### 10.14 Building resilience in Police Organisation

The police organisation can develop a resilient force by taking on board the questions related to the individual integrity and identity. The research evidence suggests that resilience can foster work performance even if a person is experiencing trauma. This gives importance of building measures to improve resilience. Although at a personal level, the

personnel adopt all measures they have to achieve resilience, the organisational efforts to understand issues and concerns is equally felt to be important.

#### 10.15 Psychological implications of dealing with traumatic experiences

Working in a life threatening environment could be dangerous to one's own safety. There are a number of factors, which could explain the psychological consequences, but it would be more relevant to describe theoretically, the psychological consequences of working in trauma situations. The model is unique in describing both positive and negative consequences thus amplifying that trauma experiences may also result in growth. This is the essence of this model.

##### *Positive Implications*

###### 1. Resilience

The first psychological implication would be to boost the resilience tendencies. Although a comprehensive psychology literature describes the resilience as a genetic or personality trait, the model describes resilience as an adaptive change trait which is learnt through exposure and experience. The resilience refers to the ability to withstand emotional trauma in a constructive manner. As much of the respondents agreed that it is resilience which helps them to move on and focus on their goals in life

###### 2. Realism

The nature of tasks in police work makes them more realistic towards what life is all about. It removes them from the illusionary state and leads to acceptance of reality to which they are exposed to. When an officer intends to join the police, it means they are accepting the terms and conditions of the work environment, the risks involved and the consequences. Their ambitions are tested in real life experiences when they perform duties and it is the time when the dreamy ambitions come into contact with reality, thus making them more realistic and prepared for further consequences.

###### 3. Self-understanding/awareness

A reflection on self and self-attributes is an important psychological implication. It is more like an increase in the horizon of self-understanding. While working with the grieved families, it gives them an opportunity to learn how to console and relate to others

experiences. It makes them more emotionally vulnerable as well as strong to be able to counsel and provide support to those who need it.

#### 4. Retrospection

All these experiences are means to retrospect (reflect) their work environment, the complex relationship of them with their work and professional lives.

#### 5. Balance and Harmony

Dealing with the day to day traumatic situations was a source of balance and harmony, if the difficult energies are dealt with properly. According to the majority of police officers in the current research, dealing with trauma was an art of balancing home and professional life and problems. Therefore, harmonious energies are dealt with properly. Therefore, harmonious work related environment and peace in personal life would strengthen and help in building resilience for traumas yet to come.

#### 6. Efficiency and dedication

The findings suggested that patriotism and loyalty with the organization and the country was one of the strongest sources of improving one's efficiency and dedication to the work. One of the possible explanations for improved performance can be that the relationship between several sub systems within the organization such as peer relationship, or relation with the supervisors is crucial in influencing work performance and health of the officer.

#### *Negative Implications*

Findings also showed that the negativity could arise from dealing with traumatic situations, which might be a result of several interlinked factors. Some of these negative outcomes are as follows:

1. Self-Blame and Criticism
2. Confusion about work role
3. Conflict with personal opinion and work related decisions
4. Identity crisis (confusion over execution of law and order)

#### *The trauma situation*

Findings indicated three types of determinants towards explaining a trauma response i.e., the pre-event factors, within event and post event factors. Interaction between these factors

influenced trauma response and behaviour. As it was observed, the family and friends were the primary support groups; the following model presents the determinants of trauma response.

As mentioned in the figure, trauma preparedness (which can be attained through extensive training and experience) assists in coordinating tasks during the event (apprehended as one of the stressors). Other factors such as officer's mental health condition, past experience of attending critical events and logistic support helped in robust emotional channelisation (managing negative outcomes). Moreover, the anecdotal evidences suggested that peer support and family cohesion was a major element in healing from such experiences.

#### 10.16 Methodological Challenges

The research was useful in identifying challenges associated with data collection and especially being a female researcher. This is a mixed methods study which aims to examine the association between trauma exposure, psychological impact, wellbeing and coping. It is informed by a grounded theory methodological approach whereby the conceptual framework is developed after in-depth face to face interviews with senior police officers in the beginning of the study. The research was carried out in two phases. The first pre study phase involved in-depth face to face interviews with senior police officers from both countries (n = 5 each). The thematic analysis of the interviews helped in developing a semi structured questionnaire to explore and examine trauma exposures and coping. This informed the second phase i.e., large scale survey. The survey questionnaire was multidimensional and was translated before its use in the two countries.

Initial findings of the study suggest important factors influencing resiliency and identifies certain coping actions positively related with boosting resiliency. This significant theme of socio cultural/religious beliefs reflects important aspect of coping from such experiences. The key element of the findings is that the psychological impact must be recognised at an early stage and be addressed at an individual as well as organisational level. The study proposes a model which suggests the role of psychological support provided by co-workers, supervisors, friends, family and public may contribute towards resilience and adaptive coping. Some of the challenges towards coping as highlighted in this study include the need to improve trauma risk awareness, counselling and support system, better

financial and safety support, freedom to exercise duty related decisions, time and stress associated with work pressures.

This study proposes a trauma metabolism model which suggests that the role of psychological support provided by co-workers, supervisors, friends, family and the public may contribute towards resilience and adaptive coping. This model can be applied to various work settings such as ambulance workers, emergency workers and military personnel.

#### 10.17 Theoretical Implications

Theoretically, the study has broadened and simplified the trauma model. The existing trauma model suggests the role of different types of coping strategies, but also integrates the psychoanalytic model to elaborate the importance of subconscious suggestions. This has various theoretical implications. For example including mixed methodology provided an enriched set of information, which helped in obtaining a holistic view of trauma and coping. Future studies may employ grounded theory methodology as an important source of information emerging from the data itself.

#### 10.18 Practical implications

The professions involved in emergency work are exposed to a number of traumatic situations. The local variables such as climatic changes can affect emotions. Simple traffic jam can induce anger and frustration. Deduction of half of the salary in the taxes, inflation, large number of children i.e., dependents, extended families are some of the issues identified in the present study

The study suggested that the flexible framework of trauma recovery and the organisations can join to formulate a joint understanding of trauma work. Since when a disaster takes place in a country like Pakistan, which is constantly exposed to threats and events, it is important to improve the liaison between different departments. Therefore the policies which are independently designed to help police officers can be improved by considering the other emergency work organizations.

### 10.19 Significance of the findings

Following elaborates the significance and importance of carrying out this study:

1. Model can be applied to other fields
2. Senior police personnel need more sensitisation and may need more networking with the junior staff
3. The performance culture needs to be more flexible
4. Early psychological assessment is identified

### 10.20 Limitations of the study

As it was briefly discussed before, there were few limitations which restricted to discuss findings further. One of them is participant selection. It was difficult to gain access to Pakistani police due to on-going situation in the country and city involved. The permission was granted but no written account of agreement was provided to the researcher. The research hired a research officer to carry out data collection from Pakistan. A proper contract was signed duly between principal investigator and the researcher about terms and conditions.

Another limitation was related to the variables in the investigation. The research area was broad and could not be possibly narrowed down. So several interrelated themes were discussed and the short comings for studying these individual variables, is highlighted in the recommendations section.

This research had the following limitations:

1. Firstly some of the factors could not be studied in detail in the present study. This includes gender, climatic conditions, and local traditional healing systems. The future studies can explore the influence of indigenous coping practices
2. Due to the time limitation, a limited number of interviews could be carried out at the initial stage
3. Due to lack of availability, few psychologists were consulted from Pakistan, thus limiting the generalisability of the findings.

## 10.21 Directions for future research

This research only begins to reveal how local and indigenous practices and resources can be used to cope in trauma, when limited time is available. In the police context, the cross cultural and mixed methodological approaches were useful ways of data collection. It is suggested that future studies may incorporate the thematic analysis and coping, and consider interviewing or focus group strategies as part of data collection. Besides this, the role of financial problems, economic conditions can be considered by the future studies. The research highlights important questions. For example what is the meaning of support within and outside a culture (for example a police culture)? How the meaning of support influences tendency to seek psychological support. Nonetheless, this study provides significant contribution by offering a framework for understanding the mechanism of coping in terms of raising conscious awareness and managing resources. If applied, the model can be useful for devising training or intervention plans to improve wellbeing and resilience of officers working in critical situations in different services such as ambulance workers, fire-fighters, nurses and doctors.

## REFERENCES

- Abbas, H. (2005). *Pakistan's drift into extremism: Allah, the army, and America's war on terror*: ME Sharpe Inc.
- Abbas, H. (2007). Transforming Pakistan's Frontier Corps. *Terrorism Monitor*, 5(6), 5-8.
- Abbas, H. (2008). Role of Pakistan Police in Counterinsurgency.
- Abbas, H. (2009). Police & Law Enforcement Reform in Pakistan: Crucial for Counterinsurgency and Counterterrorism Success. *Institute for Social Policy and Understanding*, 16.
- Abbas, H. (2011). Reforming Pakistan's Police and Law Enforcement Infrastructure: Is It Too Flawed to Fix?
- Abdool, N. N. T., & Brysiewicz, P. (2009). A description of the forensic nursing role in emergency departments in Durban, South Africa. *Journal of Emergency Nursing*, 35(1), 16-21.
- Abid, Q., & Savage, K. (2009). Remittances in Crises: A Case Study in Pakistan.
- Addis, N., & Stephens, C. (2008). An evaluation of a police debriefing programme: outcomes for police officers five years after a police shooting. *International Journal of Police Science & Management*, 10(4), 361-372.
- Agabi, C. E., & Wilson, J. P. (2005). Trauma, PTSD, and resilience. *Trauma, Violence, & Abuse*, 6(3), 195-216.
- Agolla, J. (2009). Occupational Stress Among Police Officers: The Case of Botswana Police Service. *Research Journal of Business Management*, 2(1), 25-35.
- Ahmer, S., Faruqi, R. A., & Aijaz, A. (2007). Psychiatric rating scales in Urdu: a systematic review. *BMC psychiatry*, 7(1), 59.
- Akhtar, A., Rafiq, S., Asif, A., Saeed, A., & Kashif, M. (2012). Public perceptions of police service quality: empirical evidence from Pakistan. *International Journal of Police Science & Management*, 14(2), 97-106.
- Ali, A. (2010). Economic cost of terrorism: A case study of Pakistan. *Strategic Studies (Islamabad)*, 30, 1-2.
- Ali, M., Farooq, N., Bhatti, M. A., & Kuroiwa, C. (2011). Assessment of prevalence and determinants of posttraumatic stress disorder in survivors of earthquake in Pakistan using Davidson Trauma Scale. *Journal of Affective Disorders*.
- Ali, S. (2008). The Historical Milestones. *Disasters*, 5(2).
- Allison, P. D. (2000). Multiple imputation for missing data. *Sociological methods and Research*, 28(3), 301-309.
- Amin, S. (2012). *Family relations and its influence on officers' current levels of job stress*. ALLIANT INTERNATIONAL UNIVERSITY, FRESNO.
- Anastasi, A., & Urbina, S. (1982). *Psychological testing*. New York.
- Andersson, A. K., & Chapman, L. (2011). The impact of climate change on winter road maintenance and traffic accidents in West Midlands, UK. *Accident Analysis & Prevention*, 43(1), 284-289.
- Anshel, M. H. (2000). A conceptual model and implications for coping with stressful events in police work. *Criminal Justice and Behavior*, 27(3), 375.
- Arnetz, B., Nevedal, D., Lumley, M., Backman, L., & Lublin, A. (2009). Trauma Resilience Training for Police: Psychophysiological and Performance Effects. *Journal of Police and Criminal Psychology*, 24(1), 1-9.
- Arnetz, B. B., Arble, E., Backman, L., Lynch, A., & Lublin, A. (2012). Assessment of a prevention program for work-related stress among urban police officers. *International Archives of Occupational and Environmental Health*, 1-10.

- Arnetz, B. B., Nevedal, D. C., Lumley, M. A., Backman, L., & Lublin, A. (2009). Trauma resilience training for police: Psychophysiological and performance effects. *Journal of Police and Criminal Psychology, 24*(1), 1-9.
- Asghar, M., Tufail, M., Khan, K., & Mahmood, A. (2010). Assessment of radiological hazards of clay bricks fabricated in the Punjab province of Pakistan. *Radiation protection dosimetry, 142*(2-4), 369-377.
- Asmundson, G. J. G., & Stapleton, J. A. (2008). Associations Between Dimensions of Anxiety Sensitivity and PTSD Symptom Clusters in Active Duty Police Officers. *Cognitive behaviour therapy, 37*(2), 66-75.
- Bakker, A. B., & Heuven, E. (2006). Emotional dissonance, burnout, and in-role performance among nurses and police officers. *International Journal of Stress Management, 13*(4), 423.
- Ballenger, J. F., Best, S. R., Metzler, T. J., Wasserman, D. A., Mohr, D. C., Liberman, A., et al. (2009). Patterns and predictors of alcohol use in male and female urban police officers. *The American Journal on Addictions, 20*(1), 21-29.
- Ballenger, J. F., Best, S. R., Metzler, T. J., Wasserman, D. A., Mohr, D. C., Liberman, A., et al. (2011). Patterns and predictors of alcohol use in male and female urban police officers. *The American Journal on Addictions, 20*(1), 21-29.
- Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management, 38*(1), 9-44.
- Banks, M. H., Clegg, C. W., Jackson, P. R., Kemp, N. J., Stafford, E. M., & Wall, T. D. (2011). The use of the General Health Questionnaire as an indicator of mental health in occupational studies. *Journal of Occupational Psychology, 53*(3), 187-194.
- Barrow, B. (2011). Sick-note Britain? Is a dependency culture making us ill? *Society Wars, 27*.
- Barton, L. C., & Barton, H. (2011). Challenges, issues and change: what's the future for UK policing in the twenty-first century? *International Journal of Public Sector Management, 24*(2), 146-156.
- Bates, M. J., Bowles, S., Hammermeister, J., Stokes, C., Pinder, E., Moore, M., et al. (2010). Psychological fitness. *Military Medicine, 175*(Supplement 1), 21-38.
- Baxter, J., & Baxter, J. (2011). Examining Work-Related Trauma Among Nurses and Other Professionals.
- Bayley, D., & Perito, R. (2011). Police Corruption.
- BBC. (2010). One in 10 police 'on sick leave or restricted duties'. Retrieved from <http://www.bbc.co.uk/news/uk-11917656>
- Beckley, R., & Birkinshaw, J. (2009). Dealing with a Crisis—What the Police Have Learnt and What Others Can Learn from the Police. *Policing, 3*(1), 7-11.
- Beins, B., & Beins, B. C. (2012). *APA Style Simplified: Writing in Psychology, Education, Nursing, and Sociology*: Wiley-Blackwell.
- Berger, W., Coutinho, E. S. F., Figueira, I., Marques-Portella, C., Luz, M. P., Neylan, T. C., et al. (2011). Rescuers at risk: a systematic review and meta-regression analysis of the worldwide current prevalence and correlates of PTSD in rescue workers. *Social Psychiatry and Psychiatric Epidemiology, 1-11*.
- Berking, M., Meier, C., & Wupperman, P. (2010). Enhancing emotion-regulation skills in police officers: Results of a pilot controlled study. *Behavior therapy, 41*(3), 329-339.
- Bernard-Donals, M. F. (2009). *Forgetful memory: representation and remembrance in the wake of the Holocaust*: State Univ of New York Pr.

- Berntsen, D., & Rubin, D. C. (2008). The reappearance hypothesis revisited: Recurrent involuntary memories after traumatic events and in everyday life. *Memory & cognition*, 36(2), 449-460.
- Bhutto, Z. A. (1968). *Political situation in Pakistan*: Veshasher Prakashan.
- Bilal, M. S., Rana, M. H., Rahim, S., & Ali, S. (2007). Psychological trauma in a relief worker-a case report from earthquake-struck areas of north Pakistan. *Prehospital and Disaster Medicine*, 22(5), 458.
- Binder, L. (1963). *Religion and politics in Pakistan*: Univ of California Press.
- Binder, M., & Edwards, J. S. (2010). Using grounded theory method for theory building in operations management research: A study on inter-firm relationship governance. *International Journal of Operations & Production Management*, 30(3), 232-259.
- Black, J. S., & Mendenhall, M. (1990). Cross-cultural training effectiveness: A review and a theoretical framework for future research. *Academy of Management Review*, 113-136.
- Bleich, A., Kotler, M., Kutz, I., Shaley, A., & Chambless, D. EMDR: Trauma Research Findings & Further Reading. *Clinical Psychologist*, 51, 3-16.
- Blom, A. (2011). Pakistan: The Ground Zero of Terrorism. *Journal of Policing, Intelligence and Counter Terrorism*, 6(2), 179-183.
- Bluhm, R. L., Williamson, P. C., Osuch, E. A., Frewen, P. A., Stevens, T. K., Boksman, K., et al. (2009). Alterations in default network connectivity in posttraumatic stress disorder related to early-life trauma. *Journal of psychiatry & neuroscience: JPN*, 34(3), 187.
- Bonanno, G. A., Westphal, M., & Mancini, A. D. (2011). Resilience to loss and potential trauma. *Annual Review of Clinical Psychology*, 7, 511-535.
- Boulangier, B., Dewé, W., Gilbert, A., Govaerts, B., & Maumy-Bertrand, M. (2007). Risk management for analytical methods based on the total error concept: Conciliating the objectives of the pre-study and in-study validation phases. *Chemometrics and intelligent laboratory systems*, 86(2), 198-207.
- Bowler, R. M., Harris, M., Li, J., Gocheva, V., Stellman, S. D., Wilson, K., et al. (2011). Longitudinal mental health impact among police responders to the 9/11 terrorist attack. *American journal of industrial medicine*.
- Brand, S., Gerber, M., Pühse, U., & Holsboer-Trachsler, E. (2010). Depression, hypomania, and dysfunctional sleep-related cognitions as mediators between stress and insomnia: The best advice is not always found on the pillow! *International Journal of Stress Management*, 17(2), 114.
- Brandl, S. G., & Strohshine, M. S. (2012). The Physical Hazards of Police Work Revisited. *Police Quarterly*.
- Briscoe, J. P., Henagan, S. C., Burton, J. P., & Murphy, W. M. (2012). Coping with an insecure employment environment: The differing roles of protean and boundaryless career orientations. *Journal of Vocational Behavior*.
- Brough, P. (2005). A comparative investigation of the predictors of work-related psychological well-being within police, fire and ambulance workers. *New Zealand Journal of Psychology*, 34(2), 127.
- Brough, P., & Frame, R. (2004). Predicting police job satisfaction and turnover intentions: The role of social support and police organisational variables. *New Zealand Journal of Psychology*, 33(1), 8-18.
- Brown, J. M., & Campbell, E. A. (1990). Sources of occupational stress in the police. *Work & Stress*, 4(4), 305-318.
- Bryman, A. (2008). Why do researchers integrate/combine/mesh/blend/mix/merge/fuse quantitative and qualitative research. *Advances in mixed methods research*, 87-100.

- Bureau, N. P. (2006). Annual Report, National Public Safety Commission. *National Police Bureau* 8-9
- Burke, K. J., & Shakespeare-Finch, J. (2011). Markers of Resilience in New Police Officers Appraisal of Potentially Traumatizing Events. *Traumatology*, *17*(4), 52-60.
- Buttenheim, A. (2009). Impact evaluation in the post-disaster setting: A conceptual discussion in the context of the 2005 Pakistan earthquake. *International Initiative for Impact Evaluation* (3ie).
- Campbell-Sills, L., & Stein, M. B. (2007). Psychometric analysis and refinement of the Connor-Davidson Resilience Scale (CD-RISC): Validation of a 10-item measure of resilience. *Journal of Traumatic Stress*, *20*(6), 1019-1028.
- Campbell Sills, L., & Stein, M. B. (2007). Psychometric analysis and refinement of the Connor-Davidson Resilience Scale (CD RISC): Validation of a 10 item measure of resilience. *Journal of traumatic stress*, *20*(6), 1019-1028.
- Carlier, I. V. E., Lamberts, R. D., & Gersons, B. P. R. (2000). The dimensionality of trauma: a multidimensional scaling comparison of police officers with and without posttraumatic stress disorder. *Psychiatry Research*, *97*(1), 29-39.
- Carlier, I. V. E., Voerman, A., & Gersons, B. P. R. (2000). The influence of occupational debriefing on post-traumatic stress symptomatology in traumatized police officers. *Psychology and Psychotherapy: Theory, Research and Practice*, *73*(1), 87-98.
- Carvalho, A. L. A., Cury, A. A. D. B., & Garcia, R. C. M. R. (2008). Prevalence of bruxism and emotional stress and the association between them in Brazilian police officers. *Brazilian Oral Research*, *22*(1), 31-35.
- Chang, C. M., Connor, K. M., Lai, T. J., Lee, L. C., & Davidson, J. R. T. (2005). Predictors of posttraumatic outcomes following the 1999 Taiwan earthquake. *The Journal of nervous and mental disease*, *193*(1), 40.
- Chang, C. M., Lee, L. C., Connor, K. M., Davidson, J. R. T., Jeffries, K., & Lai, T. J. (2003). Posttraumatic distress and coping strategies among rescue workers after an earthquake. *The Journal of nervous and mental disease*, *191*(6), 391-398.
- Charles, L. E., Fekedulegn, D., Miller, D. B., Wactawski-Wende, J., Violanti, J. M., Andrew, M. E., et al. (2012). Depressive Symptoms and Bone Mineral Density among Police Officers in a Northeastern US City. *Global Journal of Health Science*, *4*(3), p39.
- Chaudhry, M. A., Haider, W., Nagi, A. H., Ud-Din, Z., & Parveen, Z. (2008). Pattern of Police Torture in Punjab, Pakistan. *The American Journal of Forensic Medicine and Pathology*, *29*(4), 309.
- Chauhan, P. R., Desai, M. D., Enforcement, L., Seeking, S., & Relations, P. (2010). Role of Personality as Moderator Variable in Relationship between Occupational Stress and Psychological Well-being among Police Personnel. *Editorial Board*, 52.
- Chen, H. C., Chou, F. H. C., Chen, M. C., Su, S. F., Wang, S. Y., Feng, W. W., et al. (2006). A survey of quality of life and depression for police officers in Kaohsiung, Taiwan. *Quality of life research*, *15*(5), 925-932.
- Chopko, B. A. (2010). Posttraumatic distress and growth: An empirical study of police officers. *American journal of psychotherapy*, *64*(1), 55-72.
- Church, D., Hawk, C., Brooks, A., Toukolehto, O., Wren, M., Dinter, I., et al. (2009). *Psychological trauma in veterans using EFT (Emotional Freedom Techniques): A randomized controlled trial*.
- Cockcroft, L. (2009). Workplace smoking related absenteeism and productivity costs in Taiwan. *The Telegraph*. Retrieved from <http://www.telegraph.co.uk/health/healthnews/6135715/One-in-four-senior-police->

- [officers-suffer-depression.html#](#). doi:Workplace smoking related absenteeism and productivity costs in Taiwan
- Cockcroft, T., & Beattie, I. (2009). Shifting cultures: managerialism and the rise of “performance”. *Policing: An International Journal of Police Strategies & Management*, 32(3), 526-540.
- Connor, K. M. (2006). Assessment of resilience in the aftermath of trauma. *Journal of Clinical Psychiatry*, 67(supplement 2), 46-49.
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor Davidson Resilience Scale (CD RISC). *Depression and anxiety*, 18(2), 76-82.
- Constable, R. o. t. C. (2011). *OCCUPATIONAL HEALTH, WELFARE AND SAFETY REVIEW*.
- Corbin, J. M., & Strauss, A. L. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*: Sage Publications, Inc.
- Cordner, G. W., Cordner, A. M., & Das, D. K. (2009). *Urbanization, policing, and security: global perspectives*: CRC.
- Craig, D. V. (2009). *Action research essentials* (Vol. 11): Jossey-Bass Inc Pub.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*: Sage Publications, Inc.
- Creswell, J. W., & Clark, V. L. P. (2007). Designing and conducting mixed methods research (pp. 5): Wiley Online Library.
- Danna, K., & Griffin, R. W. (1999). Health and well-being in the workplace: A review and synthesis of the literature. *Journal of Management*, 25(3), 357-384.
- Davidson, A. C., & Moss, S. A. (2008). Examining the Trauma Disclosure of Police Officers to Their Partners and Officers' Subsequent Adjustment. *Journal of Language and Social Psychology*, 27(1), 51.
- Davis, J. A. (2011). 2 Police-Specific Psychological Services. *Handbook of police psychology*, 63.
- De Fruyt, F., De Clercq, B. J., Miller, J., Rolland, J. P., Jung, S. C., Taris, R., et al. (2009). Assessing personality at risk in personnel selection and development. *European Journal of Personality*, 23(1), 51-69.
- De Jesus Mari, J., & Williams, P. (1985). A comparison of the validity of two psychiatric screening questionnaires (GHQ-12 and SRQ-20) in Brazil, using Relative Operating Characteristic (ROC) analysis. *Psychological Medicine*, 15(03), 651-659.
- Deb, S., Chekraborty, T., Chatterjee, P., & Srivastava, N. (2008). Jobrelated stress, causal factors and coping strategies of traffic constables. *J Indian Acad Appl Psychol*, 34(1), 19-28.
- Deflem, M., & Sutphin, S. (2009). Policing Katrina: managing law enforcement in New Orleans. *Policing*, 3(1), 41-49.
- Delahanty, D. L., Koenen, K. C. O. N., Pole, N. C. O. N., & Daniel, W. (2010). *The Psychobiology of Trauma and Resilience Across the Lifespan*: Jason Aronson.
- Delle Fave, A., Massimini, F., & Bassi, M. (2010). *Psychological selection and optimal experience across cultures: social empowerment through personal growth* (Vol. 2): Springer Verlag.
- Denzin, N. (2009). *The research act: A theoretical introduction to sociological methods*: Aldine De Gruyter.
- Denzin, N. K. (1989). *The research act: A theoretical introduction to sociological methods* (Vol. 3): McGraw-Hill.

- Denzin, N. K. (2003). The practices and politics of interpretation. *Collecting and interpreting qualitative materials*, 458-498.
- DePrince, A. P., Zurbriggen, E. L., Chu, A. T., & Smart, L. (2010). Development of the trauma appraisal questionnaire. *Journal of Aggression, Maltreatment & Trauma*, 19(3), 275-299.
- Detrick, P. (2012). Police officer preemployment evaluations: Seeking consistency if not standardization?
- Draucker, C. B., Martsof, D. S., Ross, R., & Rusk, T. B. (2007). Theoretical sampling and category development in grounded theory. *Qualitative Health Research*, 17(8), 1137-1148.
- du Preez, E., Cassimjee, N., Ghazinour, M., Lauritz, L. E., & Richter, J. (2009). Personality of South African Police Trainees. *Psychological Reports*, 105(2), 539-553.
- Duckworth, D. H. (1986). Psychological problems arising from disaster work. *Stress Medicine*, 2(4), 315-323.
- Dupont, B., & Tanner, S. (2009). Not always a happy ending: the organisational challenges of deploying and reintegrating civilian police peacekeepers (a Canadian perspective). *Policing & Society*, 19(2), 134-146.
- Dutton, J. E., Roberts, L. M., & Bednar, J. (2010). Pathways for positive identity construction at work: Four types of positive identity and the building of social resources. *The Academy of Management Review (AMR)*, 35(2), 265-293.
- Dwivedi, O. (2009). The South Asian Administrative Systems: heritage and challenges. *Winning the needed change: saving our planet Earth: a global public service*, 30, 127.
- Ellahi, A., & Manarvi, I. (2010). Understanding Attitudes Towards Computer Use in the Police Department of Pakistan. *The Electronic Journal of Information Systems in Developing Countries*, 42(0).
- Ereaut, G., & Whiting, R. (2008). What do we mean by 'wellbeing'? And why might it matter: Research Report No DCSF-RW073. Dept for Children, Schools and Families.
- Evans, B. J., Coman, G. J., Stanley, R. O., & Burrows, G. D. (1993). Police officers' coping strategies: An Australian police survey. *Stress Medicine*, 9(4), 237-246.
- Fahmy, S., Cho, S., Wanta, W., & Song, Y. (2006). Visual agenda-setting after 9/11: Individuals' emotions, image recall, and concern with terrorism. *Visual Communication Quarterly*, 13(1), 4-15.
- Farooqi, Y. N. (2006). Traditional healing practices sought by Muslim psychiatric patients in Lahore, Pakistan. *International Journal of Disability, Development and Education*, 53(4), 401-415.
- Fasihuddin. (2009a). *Criminology and Criminal Justice in Pakistan*. Paper presented at the Founding Members Meeting: Asian Criminology Association (ACS).
- Fasihuddin. (2009b). *Criminology and Criminal Justice in Pakistan*. . Paper presented at the Founding Members Meeting.
- Fasihuddin. (2011). *Human Rights-Friendly Policing-A Paradigm Shift in Pakistan, A Case of KPK Police*. Paper presented at the The 2011 AAPS Annual Conference.
- Fikretoglu, D., Brunet, A., Best, S. R., Metzler, T. J., Delucchi, K., Weiss, D. S., et al. (2007). Peritraumatic fear, helplessness and horror and peritraumatic dissociation: Do physical and cognitive symptoms of panic mediate the relationship between the two? *Behaviour Research and Therapy*, 45(1), 39-47.

- Fisher, A. S. (2011). Trauma, Authenticity and the Limits of Verbatim. *Performance Research, 16*(1), 112-122.
- Fitzgerald, M. M., & Cohen, J. (2011). Trauma-Focused Cognitive-Behavioral Therapy. *Handbook of Child Sexual Abuse, 199-228.*
- Follette, V. M., Polusny, M. M., & Milbeck, K. (1994). Mental health and law enforcement professionals: Trauma history, psychological symptoms, and impact of providing services to child sexual abuse survivors. *Professional psychology: Research and practice, 25*(3), 275.
- Friedli, L. (2009). *Mental health, resilience and inequalities*: WHO Regional Office for Europe Copenhagen, Denmark.
- Gable, S. L., & Algoe, S. B. (2010). Being There When Things Go Right: Support Processes for Positive Events. *Support processes in intimate relationships, 200.*
- Gabriel, R., Ferrando, L., Cortón, E. S., Mingote, C., García-Camba, E., Liria, A. F., et al. (2007). Psychopathological consequences after a terrorist attack: An epidemiological study among victims, the general population, and police officers. *European Psychiatry, 22*(6), 339-346.
- Gao, J. (2011). An Investigation of the Impact of Operating Room Occupational Hazards on Intraoperative Nurses.
- Garbarino, S., Magnavita, N., Chiorri, C., Brisinda, D., Cuomo, G., Venuti, A., et al. (2012). Evaluation of Operational Stress in Riot and Crowd Control Police Units: A Global Challenge for Prevention and Management of Police Task-Related Stress. *Journal of Police and Criminal Psychology, 1-12.*
- Gavin, H. (2008). *Understanding research methods & statistics in psychology*: Sage.
- Gentz, D. (1991). The psychological impact of critical incidents on police officers. *Critical incidents in policing, 119-121.*
- Gerber, M., Hartmann, T., Brand, S., Holsboer-Trachsler, E., & Pühse, U. (2010). The relationship between shift work, perceived stress, sleep and health in Swiss police officers. *Journal of Criminal Justice, 38*(6), 1167-1175.
- Gershon, R. R. M., Barocas, B., Canton, A. N., Li, X., & Vlahov, D. (2009). Mental, physical, and behavioral outcomes associated with perceived work stress in police officers. *Criminal Justice and Behavior, 36*(3), 275-289.
- Gersons, B. P. R. (1989). Patterns of PTSD among police officers following shooting incidents: A two-dimensional model and treatment implications. *Journal of traumatic stress, 2*(3), 247-257.
- Ghazinour, M., Lauritz, L., Du Preez, E., Cassimjee, N., & Richter, J. (2010). An Investigation of Mental Health and Personality in Swedish Police Trainees upon Entry to the Police Academy. *Journal of Police and Criminal Psychology, 25*(1), 34-42.
- Gilbody, S., Bower, P., & Rick, J. (2012). Better care for depression in the workplace: integrating occupational and mental health services. *The British Journal of Psychiatry, 200*(6), 442-443.
- Gilmore, M. (2012). Securing Borders for the Olympic Games. *The RUSI Journal, 157*(2), 26-31.
- Gist, R., & Devilly, G. J. (2010). Early intervention in the aftermath of trauma. *Clinician's Guide to Posttraumatic Stress Disorder, 153-175.*
- Gist, R., & Taylor, V. H. (2008). Occupational and Organizational Issues in Emergency Medical Services Behavioral Health. *Journal of Workplace Behavioral Health, 23*(3), 309-330.
- Glaser, B. G. (1978a). *Theoretical sensitivity: Advances in the methodology of grounded theory*: Sociology Press, Mill Valley, Calif.

- Glaser, B. G. (1978b). *Theoretical sensitivity: Advances in the methodology of grounded theory* (Vol. 2): Sociology Press.
- Glaser, B. G. (2005). *The grounded theory perspective III: Theoretical coding*: Sociology Press.
- Goldberg, D., P., Gater, R., Sartorius, N., Ustun, T., B., Piccinelli, M., Gureje, O., et al. (1997). The validity of two versions of the GHQ in the WHO study of mental illness in general health care. *Psychological Medicine*, 27(01), 191-197.
- Goldberg, D., & Williams, P. (2006). *General health questionnaire*: GL Assessment.
- Grare, F. (2010). Political Dimensions of Police Reform in Pakistan. *Policy Outlook*.
- Gray, D. E. (2009). *Doing research in the real world*: Sage Publications Ltd.
- Green, B. (2004). Post-traumatic stress disorder in UK police officers. *Current Medical Research and Opinion®*, 20(1), 101-105.
- Greenberg, N., Langston, V., Iversen, A. C., & Wessely, S. (2011). The acceptability of 'Trauma Risk Management' within the UK Armed Forces. *Occupational Medicine*, 61(3), 184-189.
- Greenberg, N., Langston, V., & Jones, N. (2008). Trauma risk management (TRiM) in the UK Armed Forces. *JR Army Med Corps*, 154(2), 124-127.
- Griffin, D., & Kahneman, D. (2003). *A psychology of human strengths: Fundamental questions and future directions for a positive psychology*: American Psychological Association.
- Griffin, M. L., Hogan, N. L., Lambert, E. G., Tucker-Gail, K. A., & Baker, D. N. (2010). Job involvement, job stress, job satisfaction, and organizational commitment and the burnout of correctional staff. *Criminal Justice and Behavior*, 37(2), 239-255.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? *Field methods*, 18(1), 59.
- Hall, G. B., Dollard, M. F., Tuckey, M. R., Winefield, A. H., & Thompson, B. M. (2010). Job demands, work-family conflict, and emotional exhaustion in police officers: A longitudinal test of competing theories. *Journal of Occupational and Organizational Psychology*, 83(1), 237-250.
- Hallberg, L. (2010). Some thoughts about the literature review in grounded theory studies. *International journal of qualitative studies on health and well-being*, 5(3).
- Halligan, S. L., Michael, T., Clark, D. M., & Ehlers, A. (2003). Posttraumatic stress disorder following assault: The role of cognitive processing, trauma memory, and appraisals. *Journal of Consulting and Clinical Psychology*, 71(3), 419.
- Hampshire, K. R., Blell, M. T., & Simpson, B. (2012). 'Everybody is moving on': Infertility, relationality and the aesthetics of family among British-Pakistani Muslims. *Social Science & Medicine*.
- Harvey, A. G., & Bryant, R. A. (1999). A qualitative investigation of the organization of traumatic memories. *British Journal of Clinical Psychology*, 38(4), 401-405.
- Harvey, M. R. (1996). An ecological view of psychological trauma and trauma recovery. *Journal of traumatic stress*, 9(1), 3-23.
- Haw, K. (2010). Risk and resilience: The ordinary and extraordinary everyday lives of young people living in a high crime area. *Youth & Society*, 41(4), 451-474.
- Hawley, L. C., & Cacioppo, J. T. (2007). Aging and Loneliness Downhill Quickly? *Current Directions in Psychological Science*, 16(4), 187-191.
- Heath, H. (2006). Exploring the influences and use of the literature during a grounded theory study. *Journal of Research in Nursing*, 11(6), 519.
- Heller, P. S. (1975). A model of public fiscal behavior in developing countries: Aid, investment, and taxation. *The American Economic Review*, 65(3), 429-445.

- Henry, V. E. (2004). *Death work: Police, trauma, and the psychology of survival*: Oxford University Press, USA.
- Herbert, J. D., & Forman, E. M. (2010). Cross-Cultural Perspectives on Posttraumatic Stress. *Clinician's Guide to Posttraumatic Stress Disorder*, 235-261.
- Hernon, P. (2010). 2. *Management and Marketing*.
- Hernon, P., & Metoyer-Duran, C. (1993). Problem Statements: An Exploratory Study of Their Function, Significance, and Form. *Library and Information Science Research*, 15(1), 71-92.
- Hickman, M. J., Fricas, J., Strom, K. J., & Pope, M. W. (2011). Mapping Police Stress. *Police Quarterly*, 14(3), 227-250.
- Hillgren, J., & Bond, R. (1975). Stress in law enforcement: Psycho-physiological correlates and legal implications. *Journal of Forensic Psychology*, 7, 25-32.
- Hills, A. (1995). Militant Tendencies-Paramilitarism in the British Police. *Brit. J. Criminology*, 35, 450.
- Hitchcock, J. H., & O'Conner, R. (2010). Effect Sizes in Police Psychology Personality Assessment Research: A Primer (From Personality Assessment in Police Psychology: A 21st Century Perspective, P 260-278, 2010, Peter A. Weiss, ed.—see NCJ-231933).
- Hodgins, G. A., Creamer, M., & Bell, R. (2001). Risk factors for posttrauma reactions in police officers: A longitudinal study. *The Journal of nervous and mental disease*, 189(8), 541.
- Hoggett, J., & Stott, C. (2012). Post G20: The Challenge of Change, Implementing Evidence-based Public Order Policing. *Journal of Investigative Psychology and Offender Profiling*.
- Holi, M. M., Marttunen, M., & Aalberg, V. (2003). Comparison of the GHQ-36, the GHQ-12 and the SCL-90 as psychiatric screening instruments in the Finnish population. *Nordic journal of psychiatry*, 57(3), 233-238.
- Hollnagel, E., Woods, D. D., & Leveson, N. (2006). *Resilience engineering: Concepts and precepts*: Ashgate Pub Co.
- Holmgren, K. (2008). Work-related stress in women. Assessment, prevalence and return to work.
- Holmgren, K., Dahlin-Ivanoff, S., Björkelund, C., & Hensing, G. (2009). The prevalence of work-related stress, and its association with self-perceived health and sick-leave, in a population of employed Swedish women. *BMC Public Health*, 9(1), 73.
- Hooper, L. M., Stockton, P., Krupnick, J. L., & Green, B. L. (2011). Development, Use, and Psychometric Properties of the Trauma History Questionnaire. *Journal of Loss and Trauma*, 16(3), 258-283.
- Hostettler, J. (2009). *A history of criminal justice in England and Wales*: Waterside Pr.
- Huddleston, L., Stephens, C., & Paton, D. (2007). An evaluation of traumatic and organizational experiences on the psychological health of New Zealand police recruits. *Work: A Journal of Prevention, Assessment and Rehabilitation*, 28(3), 199-207.
- Huizink, A. C., Slottje, P., Witteveen, A. B., Bijlsma, J. A., Twisk, J. W. R., Smidt, N., et al. (2006). Long term health complaints following the Amsterdam Air Disaster in police officers and fire-fighters. *Occupational and Environmental Medicine*, 63(10), 657-662.
- Hull, A., Lowe, T., Devlin, M., Finlay, P., Koppel, D., & Stewart, A. (2003). Psychological consequences of maxillofacial trauma: a preliminary study. *British Journal of Oral and Maxillofacial Surgery*, 41(5), 317-322.

- Hunt, P., Irving, B., & Farnia, L. (2011). Testing the Police Workforce Resilience Hypothesis.
- Husain, M. O., Dearman, S. P., Chaudhry, I. B., Rizvi, N., & Waheed, W. (2008). The relationship between anxiety, depression and illness perception in tuberculosis patients in Pakistan. *Clinical Practice and Epidemiology in Mental Health*, 4(1), 4.
- Inman, C., & Ogden, J. (2011). Facing mortality: exploring the mechanisms of positive growth and the process of recalibration. *Psychology, health & medicine*, 16(3), 366-374.
- Inslicht, S. S., McCaslin, S. E., Metzler, T. J., Henn-Haase, C., Hart, S. L., Maguen, S., et al. (2010). Family psychiatric history, peritraumatic reactivity, and posttraumatic stress symptoms: A prospective study of police. *Journal of psychiatric research*, 44(1), 22-31.
- Inslicht, S. S., Otte, C., McCaslin, S. E., Apfel, B. A., Henn-Haase, C., Metzler, T., et al. (2011). Cortisol Awakening Response Prospectively Predicts Peritraumatic and Acute Stress Reactions in Police Officers. *Biological Psychiatry*.
- International, P. P. (2011). Youth's murder proceedings against six Rangers personnel transferred to Anti-Terrorism Court. *Pakistan Press International*, p. n/a. Retrieved from <http://search.proquest.com/docview/872452304?accountid=11526>
- Inwald, R. (2010). Use of the Inwald Personality Inventory, Hilson Tests, and Inwald Surveys for Selection, "Fitness-For-Duty" Assessment, and Relationship Counseling (From Personality Assessment in Police Psychology: A 21st Century Perspective, P 91-131, 2010, Peter A. Weiss, ed.–see NCJ-231933).
- Javaid, U. (2010). Corruption and its deep Impact on good governance in Pakistan. *Pakistan Economic and Social Review*, 48(1), 123-134.
- Jennings, W., & Lodge, M. (2009). *Governing mega-events: tools of security risk management for the London 2012 Olympic Games and FIFA 2006 World Cup in Germany*.
- Jewkes, Y., & Andrews, C. (2005). Policing the filth: The problems of investigating online child pornography in England and Wales. *Policing and Society*, 15(1), 42-62.
- Jia, Z., Tian, W., Liu, W., Cao, Y., Yan, J., & Shun, Z. (2010). Are the elderly more vulnerable to psychological impact of natural disaster? A population-based survey of adult survivors of the 2008 Sichuan earthquake. *BMC public health*, 10(1), 172.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational researcher*, 33(7), 14.
- Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). The experience of work-related stress across occupations. *Journal of Managerial Psychology*, 20(2), 178-187.
- Johnston, D., Becker, J., & Paton, D. (2012). Multi-agency community engagement during disaster recovery: lessons from two New Zealand earthquake events. *Disaster Prevention and Management*, 21(2), 8-8.
- Jones, E., & Wessely, S. (2007). A paradigm shift in the conceptualization of psychological trauma in the 20th century. *Journal of anxiety disorders*, 21(2), 164-175.
- Kararimak, Ö. (2010a). Establishing the psychometric qualities of the Connor-Davidson Resilience Scale (CD-RISC) using exploratory and confirmatory factor analysis in a trauma survivor sample. *Psychiatry research*.
- Kararimak, Ö. (2010b). Establishing the psychometric qualities of the Connor-Davidson Resilience Scale (CD-RISC) using exploratory and confirmatory factor analysis in a trauma survivor sample. *Psychiatry research*, 179(3), 350-356.

- Karim, S., Saeed, K., Rana, M. H., Mubbashar, M. H., & Jenkins, R. (2004). Pakistan mental health country profile. *International Review of Psychiatry*, *16*(1-2), 83-92.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of general psychiatry*, *62*(6), 593.
- Khan, A., Ullah, S., Azam, K., & Khan, S. (2010). Individual differences and mental health disorders among industrial workers A cross sectional survey of Hayatabad Industrial Estate Peshawar, Pakistan. *International Review of Business Research Papers*, *6*(1), 30-39.
- Khan, F. (2007). Corruption and the Decline of the State in Pakistan. *Asian Journal of Political Science*, *15*(2), 219-247.
- Khan, N. A. (2009). Suicide Bombing in the NWFP, The Need for Research and Information Collection on Human Bombers'. *Pakistan Journal of Criminology*, *1*(1).
- Khan, S., Rehman, R., Shah, A., & Khan, H. (2009). Public perceptions of local government in Pakistan: a survey. *Journal of Asian Public Policy*, *2*(2), 232-240.
- Khan, W. S. (2011). Joan Shorenstein Center on the Press, Politics and Public Policy.
- Khoshouei, M. S. (2009). Psychometric evaluation of the Connor-Davidson Resilience Scale (CD-RISC) using Iranian students. *International Journal of Testing*, *9*(1), 60-66.
- King, M., & Waddington, D. (2004). Coping with disorder? the changing relationship between police public order strategy and practice—a critical analysis of the Burnley Riot. *Policing and Society*, *14*(2), 118-137.
- King, N., & Horrocks, C. (2010). *Interviews in qualitative research*: Sage Publications Ltd.
- Kirby, R., Shakespeare-Finch, J., & Palk, G. (2011). Adaptive and Maladaptive Coping Strategies Predict Posttrauma Outcomes in Ambulance Personnel. *Traumatology*, *17*(4), 25-34.
- Kirkcaldy, B. D., Brown, J., & Cooper, C. L. (1994). Occupational stress profiles of senior police managers: Cross-cultural study of officers from Berlin and northern Ireland. *Stress Medicine*, *10*(2), 127-130.
- Körllin, J., Alexanderson, K., & Svedberg, P. (2009). Sickness absence among women and men in the police: A systematic literature review. *Scandinavian journal of public health*, *37*(3), 310-319.
- Kronstadt, K. A. (2010). *Pakistan: Key current issues and developments*.
- Landsbergis, P. A. (2009). Interventions to reduce job stress and improve work organization and worker health. *Unhealthy work: causes, consequences, cures*. New York: Baywood.
- Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American psychologist*, *46*(8), 819.
- Lee Duckworth, A., Steen, T. A., & Seligman, M. E. P. (2005). Positive psychology in clinical practice. *Annu. Rev. Clin. Psychol.*, *1*, 629-651.
- Lee, M., Nabi, A., Baloch, D. A., Ras, J. M. J., Wazir, M. M. K., Islam, M. T., et al. (2010). Pakistan Journal of Criminology. *Pakistan Journal of Criminology*, *2*(2).
- Lee, Y. O., & Lee, R. M. (2012). Methodological Research on “Sensitive” Topics A Decade Review. *Bulletin of Sociological Methodology/Bulletin de Méthodologie Sociologique*, *114*(1), 35-49.

- Leineweber, C., Westerlund, H., Hagberg, J., Svedberg, P., Luukkala, M., & Alexanderson, K. (2011). Sickness presenteeism among Swedish police officers. *Journal of occupational rehabilitation, 21*(1), 17-22.
- Liberman, A. M., Best, S. R., Metzler, T. J., Fagan, J. A., Weiss, D. S., & Marmar, C. R. (2002). Routine occupational stress and psychological distress in police. *Policing: An International Journal of Police Strategies & Management, 25*(2), 421-441.
- Lieven, A. (2011). *Pakistan: a hard country*: Public Affairs.
- Lilly, M. M., Pole, N., Best, S. R., Metzler, T., & Marmar, C. R. (2009). Gender and PTSD: What can we learn from female police officers? *Journal of anxiety disorders, 23*(6), 767-774.
- Linley, P. A., Joseph, S., & Seligman, M. E. P. (2004). *Positive psychology in practice*: Wiley New Jersey.
- Loftus, B. (2009). *Police culture in a changing world*: Oxford University Press Oxford.
- Lösch, A. (2006). Combining quantitative methods and grounded theory for researching e-reverse auctions. *Libri, 56*(3), 133-144.
- Lucas, T., Weidner, N., & Janisse, J. (2012). Where does work stress come from? A generalizability analysis of stress in police officers.
- Lumb, R. C., Breazeale, R. L., Lumb, P. J., & Metz, G. (2010). Silent Killer.
- Ma, C. C., Burchfiel, C. M., Fekedulegn, D., Andrew, M. E., Charles, L. E., Gu, J. K., et al. (2011). Association of Shift Work With Physical Activity Among Police Officers: The Buffalo Cardio-Metabolic Occupational Police Stress Study. *Journal of Occupational and Environmental Medicine, 53*(9), 1030.
- Maguen, S., Metzler, T. J., McCaslin, S. E., Inslicht, S. S., Henn-Haase, C., Neylan, T. C., et al. (2009). Routine work environment stress and PTSD symptoms in police officers. *The Journal of nervous and mental disease, 197*(10), 754.
- Mahendra, L., Austin, R. D., Kumar, S. S., Mahendra, J., & Felix, A. (2012). Association between Stress Hormone and Chronic Periodontitis. *International Journal of Contemporary Dentistry, 3*(1).
- Maia, D. B., Marmar, C. R., Metzler, T., Nóbrega, A., Berger, W., Mendlowicz, M. V., et al. (2007). Post-traumatic stress symptoms in an elite unit of Brazilian police officers: prevalence and impact on psychosocial functioning and on physical and mental health. *Journal of affective disorders, 97*(1-3), 241-245.
- Malik, S. (2009). Security Sector Reforms in Pakistan. *South Asian Survey, 16*(2), 273-289.
- Marmar, C. R., McCaslin, S. E., Metzler, T. J., Best, S., Weiss, D. S., Fagan, J., et al. (2006). Predictors of posttraumatic stress in police and other first responders. *Annals of the New York Academy of Sciences, 1071*(1), 1-18.
- Marshall, C., & Rossman, G. B. (2010). *Designing qualitative research*: Sage Publications, Inc.
- Mason, S. T., Lauterbach, D., McKibben, J., Lawrence, J. W., & Fauerbach, J. A. (2012). Confirmatory Factor Analysis and Invariance of the Davidson Trauma Scale (DTS) in a Longitudinal Sample of Burn Patients.
- Mattar, S., Droždek, B., & Figley, C. R. (2010). Introduction to Special Issue: Culture and Trauma. *Traumatology, 16*(4), 1-4.
- Maxwell, J. A. (2005). *Qualitative research design: An interactive approach*: Sage Publications, Inc.
- Mazzola, J. J., & Kessler, S. R. (2012). Counterproductive Work Behaviors and Their Ethical Dilemmas: Creating Just, Respectful, and Productive Organizations. *Work and Quality of Life, 157-179*.

- McCann, I. L., & Pearlman, L. A. (1990). *Psychological trauma and the adult survivor: Theory, therapy, and transformation*: Routledge.
- McFarlane, A. C., Williamson, P., & Barton, C. A. (2009). The impact of traumatic stressors in civilian occupational settings. *Journal of Public Health Policy*, 30(3), 311-327.
- McMains, M. J., & Mullins, W. C. (2010). *Crisis Negotiations: Managing Critical Incidents and Hostage Situations in Law Enforcement and Corrections*: Anderson.
- Meichenbaum, D. (2011). Resiliency building as a means to prevent PTSD and related adjustment problems in military personnel. *Treating PTSD in Military Personnel: A Clinical Handbook*, 325.
- Meredith, L. S., Sherbourne, C. D., & Gaillot, S. J. (2011). *Promoting psychological resilience in the US military*: Rand Corporation.
- Minhas, F., & Mubbashar, M. (1996). Validation of General Health Questionnaire (GHQ-12) in primary care settings of Pakistan. *Journal of the College of Physicians and Surgeons Pakistan*, 6, 133-136.
- Moad, S. C. (2011). Critical Incidents: Responding to Police Officer Trauma.
- Moïsi, D. (2009). *The geopolitics of emotion: how cultures of fear, humiliation, and hope are reshaping the world*: Doubleday Books.
- Monat, A., Lazarus, R. S., & Reevy, G. (2007). *The Praeger handbook on stress and coping* (Vol. 2): Praeger Publishers.
- Montazeri, A., Baradaran, H., Omidvari, S., Azin, S. A., Ebadi, M., Garmaroudi, G., et al. (2005). Psychological distress among Bam earthquake survivors in Iran: a population-based study. *BMC public health*, 5(1), 4.
- Moore, K. (2011). Frameworks for Understanding the inter-generational transmission of poverty and well-being in developing countries.
- Morash, M., Kwak, D. H., Hoffman, V., Lee, C. H., Cho, S. H., & Moon, B. (2008). Stressors, coping resources and strategies, and police stress in South Korea. *Journal of Criminal Justice*, 36(3), 231-239.
- Mostert, K., & Rothmann, S. (2006). Work-related well-being in the South African Police Service. *Journal of Criminal Justice*, 34(5), 479-491.
- Motsi, R. G., & Masango, M. J. (2012). Redefining trauma in an African context: A challenge to pastoral care. *HTS Teologiese Studies/Theological Studies*, 68(1), 8 pages.
- Mulligan, K., Jones, N., Woodhead, C., Davies, M., Wessely, S., & Greenberg, N. (2010). Mental health of UK military personnel while on deployment in Iraq. *The British Journal of Psychiatry*, 197(5), 405-410.
- Murray, T. (2007). Police-building in Afghanistan: A case study of civil security reform. *International Peacekeeping*, 14(1), 108-126.
- Myers, C. S. (2011). *Shell Shock in France, 1914-1918: Based on a War Diary*: Cambridge Univ Pr.
- Naeem, F., Ayub, M., Masood, K., Gul, H., Khalid, M., Farrukh, A., et al. (2011). Prevalence and psychosocial risk factors of PTSD: 18months after Kashmir earthquake in Pakistan. *Journal of Affective Disorders*, 130(1), 268-274.
- Najam, N., Gul, I., & Mansoor, A. (2006, 10-13 July 2006). *Psychological Assessment of Security Personnel*. Paper presented at the 64th Annual Convention. International Council of Psychologists Kos, Greece.
- Neely, P., & Cleveland, C. S. (2011). The Impact Of Job-Related Stressors On Incidents Of Excessive Force By Police Officers. *American Journal of Health Sciences (AJHS)*, 3(1), 63-74.

- Newman, E., & Kaloupek, D. G. (2004). The risks and benefits of participating in trauma-focused research studies. *Journal of traumatic stress, 17*(5), 383-394.
- Neylan, T. C., Metzler, T. J., Best, S. R., Weiss, D. S., Fagan, J. A., Liberman, A., et al. (2002). Critical incident exposure and sleep quality in police officers. *Psychosomatic Medicine, 64*(2), 345-352.
- Ning, Y. (2011). On the Performance Management of Police Organization under the View of New Public Administration. *Journal of Beijing People's Police College.*
- NPIA. (2011). Resilience.
- Nydegger, R. (2011). Occupational Stress And Job Satisfaction In White-And Blue-Collar Workers. *International Business & Economics Research Journal (IBER), 1*(12).
- O'Prey, C. (2009). The Policing of the G20 Protests: An exploration of contemporary work on Control Societies and the State of Exception: E-Merge.
- Oatley, K., & Johnson-Laird, P. N. (1987). Towards a cognitive theory of emotions. *Cognition and emotion, 1*(1), 29-50.
- Overholser, J. C. (1992). Sense of humor when coping with life stress. *Personality and individual differences, 13*(7), 799-804.
- Page, K. S., & Jacobs, S. C. (2011). Surviving the shift: Rural police stress and counseling services. *Psychological Services, 8*(1), 12.
- Pandit, N. R. (1996). The creation of theory: A recent application of the grounded theory method. *The qualitative report, 2*(4), 1-14.
- Partington, D. (2002). Grounded theory. *Essential Skills for Management Research, 136-157.*
- Paton, D. (2009). *Traumatic stress in police officers: a career-length assessment from recruitment to retirement*: Charles C. Thomas Publisher.
- Paton, D., & Johnston, D. (2001). Disaster and communities: vulnerability, resilience and preparedness. *Disaster Prevention and Management, 10*, 270-277.
- Paton, D., Violanti, J. M., Johnston, P., Burke, K., Clarke, J., & Keenan, D. (2008). Stress shield: a model of police resiliency. *International Journal of Emergency Mental Health, 10*(2), 95.
- Pearson, D. (2012). 6 Inquiring into Children's Development and Behaviour. *Inquiring in the Classroom: Asking the Questions That Matter About Teaching and Learning, 94.*
- Peres, J. F. P., Foerster, B., Santana, L. G., Ferreira, M. D., Nasello, A. G., Savoia, M., et al. (2011). Police officers under attack: Resilience implications of an fMRI study. *Journal of psychiatric research, 45*(6), 727-734.
- Peterson, C. (2006). *A primer in positive psychology*: Oxford University Press, USA.
- Petri, H. L., & Govern, J. M. (2004). *Theory, research, and applications*: Belmont, USA: Thompson Wadsworth.
- Phillips, S. B., & Kane, D. (2009). *Healing Together: A Couple's Guide to Coping with Trauma and Post-Traumatic Stress*: New Harbinger Pubns Inc.
- Pierce, H., & Lilly, M. M. (2012). Duty-related trauma exposure in 911 telecommunicators: Considering the risk for posttraumatic stress. *Journal of Traumatic Stress.*
- Pineles, S. L., Rasmussen, A. M., Yehuda, R., Lasko, N. B., Macklin, M. L., Pitman, R. K., et al. (2012). Predicting emotional responses to potentially traumatic events from pre-exposure waking cortisol levels: a longitudinal study of police and firefighters.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology, 88*(5), 879.

- Pole, N., Kulkarni, M., Bernstein, A., & Kaufmann, G. (2006). Resilience in retired police officers. *Traumatology, 12*(3), 207-216.
- Pole, N., Neylan, T. C., Otte, C., Henn-Hasse, C., Metzler, T. J., & Marmar, C. R. (2009). Prospective prediction of posttraumatic stress disorder symptoms using fear potentiated auditory startle responses. *Biological Psychiatry, 65*(3), 235-240.
- Police, W. Y. (2012a). County Profile. Retrieved 27-06-2012, from <http://www.westyorkshire.police.uk/about-us/county-profile>
- Police, W. Y. (2012b). Occupational Health Unit. Retrieved 25 June 2010, from <http://www.westyorkshire.police.uk/about-us/department-profiles/occupational-health-unit>
- Pomaki, G., Maes, S., & ter Doest, L. (2004). Work conditions and employees' self-set goals: Goal processes enhance prediction of psychological distress and well-being. *Personality and Social Psychology Bulletin, 30*(6), 685-694.
- Potgieter, A. (2011). *Social media and the 2011 London riots*.
- Press, A. (2008a). Pakistan police losing terrorism fight. Retrieved from [http://www.msnbc.msn.com/id/28057057/ns/world\\_news-south\\_and\\_central\\_asia/t/pakistan-police-losing-terrorism-fight/#.Tt0bn7Ir2dA](http://www.msnbc.msn.com/id/28057057/ns/world_news-south_and_central_asia/t/pakistan-police-losing-terrorism-fight/#.Tt0bn7Ir2dA)
- Press, A. (2008b, 12/4/2008). Pakistan police losing terrorism fight. Retrieved 17 December 2011, 2011, from [http://www.msnbc.msn.com/id/28057057/ns/world\\_news-south\\_and\\_central\\_asia/t/pakistan-police-losing-terrorism-fight/#.TuyAJzXt9H4](http://www.msnbc.msn.com/id/28057057/ns/world_news-south_and_central_asia/t/pakistan-police-losing-terrorism-fight/#.TuyAJzXt9H4)
- Punjab Police, G. o. P. (2011). Psychological testing of police officials from today. Retrieved 10/06/2012, 2012, from <http://www.punjabpolice.gov.pk/node/391>
- Radun, I., Ohisalo, J., Radun, J., & Kecklund, G. (2011). Night Work, Fatigued Driving and Traffic Law: The Case of Police Officers. *Industrial health*(0), 1102240060.
- Rahman, T. (2012). Pakistan's policies and practices towards the religious minorities. *South Asian History and Culture, 3*(2), 302-315.
- Ramsay, A. A. W. (1928). *Sir Robert Peel: Books for Libraries*.
- Randers, J. (1980). Guidelines for model conceptualization. *Elements of the system dynamics method, 117-139*.
- Ranta, R. S. (2009). Management of Stress and Coping Behaviour of Police Personnel through Indian Psychological Techniques. *Journal of the Indian Academy of Applied Psychology, 35*(1), 47-53.
- Ras, J. (2010). Policing the Northwest Frontier Province of Pakistan: Practical Remarks from a South African Perspective. *Pakistan Journal of Criminology, 2*(1), 107-122.
- Redman, T., Hamilton, P., Malloch, H., & Kleymann, B. (2011). Working here makes me sick! The consequences of sick building syndrome. *Human Resource Management Journal, 21*(1), 14-27.
- Reese, J. T. (1987). A history of police psychological services. *Washington, DC: US Department of Justice, Federal Bureau of Investigation*.
- Regehr, C., Johannis, D., Dimitropoulos, G., Bartram, C., & Hope, G. (2003). The police officer and the public inquiry: A qualitative inquiry into the aftermath of workplace trauma. *Brief Treatment and Crisis Intervention, 3*(4), 383.
- Regehr, C., & LeBlanc, V. (2011). 11 Stress and trauma in the emergency services. *Handbook of Stress in the Occupations, 201*.
- Reynolds, C. A., & Wagner, S. L. (2008). Stress and First Responders: The Need for a Multidimensional Approach to Stress Management. *The International Journal of Disability Management Research, 2*(2), 27-36.
- Rice, V. H. (2011). *Handbook of stress, coping, and health: Implications for nursing research, theory, and practice*: Sage Publications, Inc.

- Riedel, B. (2008). Pakistan and terror: The eye of the storm. *The ANNALS of the American Academy of Political and Social Science*, 618(1), 31-45.
- Robson, C. (2011). *Real world research: a resource for users of social research methods in applied settings*: Wiley.
- Romero, E. J., & Cruthirds, K. W. (2006). The use of humor in the workplace. *The Academy of Management Perspectives ARCHIVE*, 20(2), 58-69.
- Saakvitne, K. W., Tennen, H., & Affleck, G. (1998). Exploring thriving in the context of clinical trauma theory: Constructivist self development theory. *Journal of Social Issues*, 54(2), 279-299.
- Sadock, B. J., & Sadock, V. A. (2008). *Kaplan & Sadock's concise textbook of clinical psychiatry*: Lippincott Williams & Wilkins.
- Sahir, M. H., & Qureshi, A. H. (2007). Specific concerns of Pakistan in the context of energy security issues and geopolitics of the region. *Energy policy*, 35(4), 2031-2037.
- Saks, M., & Rahaman, B. A. (2011). Work-Related Trauma and Injury. *Occupational Emergency Medicine*, 84-95.
- Sales, B. D., & Folkman, S. E. (2000). *Ethics in research with human participants*: American Psychological Association.
- Salman, A. (2012). Decentralization in Pakistan-Lessons and Challenges.
- Santana, Â. M. C., Gomes, J. K. V., De Marchi, D., Girondoli, Y. M., de Lima Rosado, L. E. F. P., Rosado, G. P., et al. (2012). Occupational stress, working condition and nutritional status of military police officers. *Work: A Journal of Prevention, Assessment and Rehabilitation*, 41, 2908-2914.
- Schmidt, J. R. (2009). The Unravelling of Pakistan. *Survival*, 51(3), 29-54.
- Schueller, S. M. (2009). Promoting wellness: Integrating community and positive psychology. *Journal of Community Psychology*, 37(7), 922-937.
- Schwerdtfeger, K. L. (2009). The Appraisal of Quantitative and Qualitative Trauma-Focused Research Procedures among Pregnant Participants. *Journal of Empirical Research on Human Research Ethics*, 4(4), 39-51.
- Seedat, S., & Stein, M. B. (2001). Post-traumatic stress disorder: a review of recent findings. *Current psychiatry reports*, 3(4), 288-294.
- Seligman, M. (2012). *Flourish: A visionary new understanding of happiness and well-being*: Free Pr.
- Sesma, A., Mannes, M., & Scales, P. C. (2005). Positive adaptation, resilience, and the developmental asset framework. *Handbook of resilience in children*, 281-296.
- Sharma, P., & Sharma, V. (2011). Study of Climate extremes impacts on temperament, physical health and Psychological distress among adults. *Int. J. Sci. Emerging Tech. Vol*, 2(3), 111.
- Shea, K. P. (2010). *The effects of combat related stress on learning in an academic environment: A qualitative case study*. Kansas State University.
- Shera, A. S., Basit, A., Fawwad, A., Hakeem, R., Ahmedani, M. Y., Hydrie, M., et al. (2010). Pakistan National Diabetes Survey: Prevalence of glucose intolerance and associated factors in the Punjab Province of Pakistan. *Primary care diabetes*, 4(2), 79-83.
- Shirey, M. R. (2006). Stress and coping in nurse managers: two decades of research. *Nursing Economics*, 24(4), 193.
- Shoukat, S., Anis, M., Kella, D. K., Qazi, F., Samad, F., Mir, F., et al. (2010). Prevalence of Mistreatment or Belittlement among Medical Students—A Cross Sectional Survey at a Private Medical School in Karachi, Pakistan. *PloS one*, 5(10), e13429.

- Siddicja, A. (2005). Pakistan: Political Economy of National Security. *Pakistan: democracy, development, and security issues*, 123.
- Silverman, D. (2009). *Doing qualitative research*: Sage Publications Ltd.
- Simpson, M. R. (2009). Engagement at work: A review of the literature. *International Journal of Nursing Studies*, 46(7), 1012-1024.
- Smith, K. (2011). How local authority services may be affected during the 2012 Olympics and how they can be maintained. *Journal of Business Continuity & Emergency Planning*, 5(1), 474-483.
- Snyder, C. R., & Lopez, S. J. (2007). *Positive psychology: The scientific and practical explorations of human strengths*: Sage Publications, Inc.
- Soklaridis, S., Ammendolia, C., & Cassidy, D. (2010). Looking upstream to understand low back pain and return to work: Psychosocial factors as the product of system issues. *Social Science & Medicine*, 71(9), 1557-1566.
- Spurgeon, P., Mazelan, P., & Barwell, F. (2012). The organizational stress measure: an integrated methodology for assessing job-stress and targeting organizational interventions. *Health Services Management Research*, 25(1), 7-15.
- Stansfeld, S. A., Rasul, F., Head, J., & Singleton, N. (2011). Occupation and mental health in a national UK survey. *Social Psychiatry and Psychiatric Epidemiology*, 46(2), 101-110.
- Stephens, C., & Miller, I. (1998). Traumatic experiences and post-traumatic stress disorder in the New Zealand police. *Policing: An International Journal of Police Strategies & Management*, 21(1), 178-191.
- Stewart, D. D., & Stasser, G. (1995). Expert role assignment and information sampling during collective recall and decision making. *Journal of Personality and Social Psychology*, 69(4), 619.
- Stewart, L. S. S., & Rock, N. L. (2011). Post-Traumatic Stress Disorder and the Effect on Law Enforcement.
- Strauss, A. L., & Corbin, J. M. (1997). *Grounded theory in practice*: Sage Publications, Inc.
- Strauss, A. L., & Corbin, J. M. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*: Sage Publications, Inc.
- Subramaney, U., Vorster, M., & Pitts, N. (2011). 209. HPA axis and immune responses in a Metro police cohort susceptible to PTSD. *Brain, Behavior, and Immunity*, 25, S239-S239.
- Suddle, M. S. (2003). Reforming Pakistan Police: An Overview. *United Nations Asia and*
- Suhail, K., & Ajmal, M. A. (2009). Counseling in Pakistan. *International Handbook of Cross-Cultural Counseling: Cultural Assumptions and Practices Worldwide*, 237.
- Suhail, K., Malik, F., Mir, I. A., Hasan, S. S., Sarwar, A., & Tanveer, S. (2009). Psychological Health of Earthquake Survivors in Pakistan. *Psychology & Developing Societies*, 21(2), 183.
- Sumathipala, A., Siribaddana, S., & Perera, C. (2006). Management of dead bodies as a component of psychosocial interventions after the tsunami: A view from Sri Lanka. *International Review of Psychiatry*, 18(3), 249-257.
- Summerfield, D. (2011). Metropolitan Police blues: protracted sickness absence, ill health retirement, and the occupational psychiatrist. *BMJ*, 342.
- Syed, H. R., Zachrisson, H. D., Dalgard, O. S., Dalen, I., & Ahlberg, N. (2008). Concordance between Hopkins Symptom Checklist(HSCL-10) and Pakistan Anxiety and Depression Questionnaire(PADQ), in a rural self-motivated population in Pakistan. *BMC psychiatry*, 8(1), 59.
- Talbot, I. (1998). *Pakistan: A modern history*: Palgrave Macmillan.

- Talbott, J. E. (1997). Soldiers, psychiatrists, and combat trauma. *The Journal of Interdisciplinary History*, 27(3), 437-454.
- Tashakkori, A., & Teddlie, C. (2003). *Handbook of mixed methods in social & behavioral research*: Sage Publications, Inc.
- Tehrani, N. (2010). Compassion fatigue: experiences in occupational health, human resources, counselling and police. *Occupational Medicine*, 60(2), 133-138.
- Tennant, C. (2001). Work-related stress and depressive disorders. *Journal of psychosomatic research*, 51(5), 697-704.
- Thomas, D. J. (2011). *Police psychology: a new specialty and new challenges for men and women in blue*: Praeger Pub Text.
- Tiesman, H. M., Hendricks, S. A., Bell, J. L., & Amandus, H. A. (2010). Eleven years of occupational mortality in law enforcement: the census of fatal occupational injuries, 1992–2002. *American journal of industrial medicine*, 53(9), 940-949.
- Traub, J. (2009). Can Pakistan Be Governed? *New York Times*, 5.
- Tuckey, M. R., Winwood, P. C., & Dollard, M. F. (2011). Psychosocial culture and pathways to psychological injury within policing.
- Turner, M. S. (2012). *The Impact of Hurricane Katrina on Police Occupational Stress After Adjusting for Levels of Social Support*. HOWARD UNIVERSITY.
- Ungar, M. (2008). Resilience across cultures. *British Journal of Social Work*, 38(2), 218-235.
- Utsey, S. O., Bolden, M. A., Lanier, Y., & Williams, O. (2007). Examining the role of culture-specific coping as a predictor of resilient outcomes in African Americans from high-risk urban communities. *Journal of Black Psychology*, 33(1), 75-93.
- Vaghela, K. R. (2009). Plastic surgery and burns disasters. What impact do major civilian disasters have upon medicine? Bradford City Football Club stadium fire, 1985, King's Cross Underground fire, 1987, Piper Alpha offshore oil rig disaster, 1988. *Journal of Plastic, Reconstructive & Aesthetic Surgery*, 62(6), 755-763.
- Vaillant, G. E. (2011). Involuntary coping mechanisms: a psychodynamic perspective. *Dialogues in clinical neuroscience*, 13(3), 366.
- Van Gelderen, B., Heuven, E., Van Veldhoven, M., Zeelenberg, M., & Croon, M. (2007). Psychological strain and emotional labor among police-officers: A diary study. *Journal of Vocational Behavior*, 71(3), 446-459.
- Vincent, E. H. (2004). *Death work: Police, trauma, and the psychology of survival*: Oxford University Press, USA.
- Violanti, J. M. (1992). Coping strategies among police recruits in a high-stress training environment. *The Journal of social psychology*, 132(6), 717-729.
- Violanti, J. M. (2007). *Police suicide: Epidemic in blue*: Charles C. Thomas Publisher.
- Violanti, J. M., & Samuel, S. (2007). Under the blue shadow. *clinical and behavioral perspectives on police suicide*, 62.
- Viswesvaran, C., Sanchez, J. I., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior*, 54(2), 314-334.
- Vrouva, I., & Dennington, L. (2011). "Hug a Hoodie": Reflections in the Aftermath of the English Riots. *International Journal of Applied Psychoanalytic Studies*, 8, 341-345.
- Waldegrave, C. (2009). Cultural, gender, and socioeconomic contexts in therapeutic and social policy work. *Family process*, 48(1), 85-101.
- Ward, C., Lombard, C., & Gwebushe, N. (2006). Critical incident exposure in South African emergency services personnel: prevalence and associated mental health issues. *Emergency medicine journal*, 23(3), 226-231.

- Weathers, F. W., & Keane, T. M. (2007). The Criterion A problem revisited: controversies and challenges in defining and measuring psychological trauma. *Journal of Traumatic Stress, 20*(2), 107-121.
- Webster, B. (2008). Combat Deployment and the Returning Police Officer.
- Weiss, D. S., Brunet, A., Best, S. R., Metzler, T. J., Liberman, A., Pole, N., et al. (2010). Frequency and severity approaches to indexing exposure to trauma: The Critical Incident History Questionnaire for police officers. *Journal of traumatic stress, 23*(6), 734-743.
- Weiss, D. S., Brunet, A., Best, S. R., Metzler, T. J., Liberman, A., Pole, N., et al. (2010). Frequency and severity approaches to indexing exposure to trauma: The Critical Incident History Questionnaire for police officers. *Journal of traumatic stress.*
- Weissman, M. M., Bland, R. C., Canino, G. J., Faravelli, C., Greenwald, S., Hwu, H.-G., et al. (1996). Cross-National Epidemiology of Major Depression and Bipolar Disorder. *JAMA: The Journal of the American Medical Association, 276*(4), 293-299.
- Wheatcroft, J. M., Alison, L. A., & McGrory, D. (2012). The Influence of Trust on Senior Investigating Officers' Decision Making in High-Profile Critical Incidents. *Police Quarterly.*
- White, D., & Heslop, R. (2012). Educating, legitimising or accessorising? Alternative conceptions of professional training in UK higher education: a comparative study of teacher, nurse and police officer educators.
- White, M. D., & Klinger, D. (2012). Contagious Fire? An Empirical Assessment of the Problem of Multi-shooter, Multi-shot Deadly Force Incidents in Police Work. *Crime & Delinquency, 58*(2), 196-221.
- Williams, C. A. (2011). Police Governance—Community, Policing, and Justice in the Modern UK. *Taiwan in Comparative Perspective, 3*, 50-65.
- Williams, V., Ciarrochi, J., & Deane, F. P. (2010). On being mindful, emotionally aware, and more resilient: Longitudinal pilot study of police recruits. *Australian Psychologist, 45*(4), 274-282.
- Wilson, J. P., & Lindy, J. D. (1994). *Countertransference in the treatment of PTSD*: The Guilford Press.
- Windle, G., Bennett, K. M., & Noyes, J. (2011). A methodological review of resilience measurement scales. *Health and quality of life outcomes, 9*(1), 1-18.
- Winwood, P. C., Tuckey, M. R., Peters, R., & Dollard, M. F. (2009). Identification and measurement of work-related psychological injury: piloting the psychological injury risk indicator among frontline police. *Journal of Occupational and Environmental Medicine, 51*(9), 1057.
- Wright, M. O. D., & Masten, A. S. (2005). Resilience processes in development. *Handbook of resilience in children, 17-37.*
- Wu, Y., & Sun, I. Y. (2009). Citizen Trust in Police The Case of China. *Police Quarterly, 12*(2), 170-191.
- Wu, Y., Sun, I. Y., & Cretacci, M. A. (2009). A study of cadets' motivation to become police officers in China. *International Journal of Police Science & Management, 11*(3), 377-392.
- Yehuda, R., Flory, J. D., Southwick, S., & Charney, D. S. (2006). Developing an agenda for translational studies of resilience and vulnerability following trauma exposure. *Annals of the New York Academy of Sciences, 1071*(1), 379-396.
- Yoshimasu, K., Fukumoto, J., Takemura, S., Shiozaki, M., Yamamoto, H., & Miyashita, K. (2011). Subjective Symptoms Related to Suicide Risk in Japanese Male Police Officers.

- Yu, X., & Zhang, J. (2007). Factor analysis and psychometric evaluation of the Connor-Davidson resilience scale (CD-RISC) with Chinese people. *Social Behavior and Personality: an international journal*, 35(1), 19-30.
- Zernova, M. (2012). The public image of the contemporary Russian police: Impact of personal experiences of policing, wider social implications and the potential for change. *Policing: An International Journal of Police Strategies & Management*, 35(2), 216-230.
- Zhang, Y. (2011). A Study of Effects of for the Elementary School Teachers Personality and Coping Policy Upon the Work Stress in Zhanghua Country.
- Zimmermann, M. N., & Issa, S. S. (2009). Risk-conscious reconstruction in Pakistan-administered Kashmir. *Mountain Research and Development*, 29(3), 202-210.

## APPENDIX A: Explanatory Statement of the Research

I am studying at the University of Huddersfield under the supervision of Dr. Helen Gavin and Prof. Alex Hirschfield. I am conducting research on traumatic experiences of police officers and emotional reactions to those events (critical incidents). This study is part of my PhD thesis. I would like to invite you to participate in this study.

I would like to discuss your in-service experiences of encounters with traumatic events (events which have had negative influence on your wellbeing). Furthermore it would be appreciated if you can recall specific encounters which triggered specific emotional/behavioural reactions such as anger, anxiety etc. Your response will be helpful in understanding relationship between perception of negative experiences, response and overall wellbeing. The research would involve about an hour meeting with me at the beginning of the project. I will ask about your personal experience with work and how you felt about it. What has helped you to deal better with the critical incident experiences? The interview will be audio-recorded throughout.

I will like you to answer some questions about your quality of life, social adjustment and emotional processing.

This study has been cleared by the ethics committee of the School of Human and Health Sciences (The University of Huddersfield) in accordance with the British Psychological Society's ethical guidelines. Feel free to contact Dr Helen Gavin, about your participation in this research supervisor, at 2789.

I have approached the police main division and have got approval from concerned authorities.

The confidentiality and anonymity of your participation and responses will be fully respected. All information will be safely secured. Your identity will not be revealed at any stage (or after) of this research. In addition, you have right to withdraw from the research any time.

I hope that you agree to take part in this study. Please attach your consent with this letter. If you need any more information about this research, I am happy to discuss at email: [s.naz@hud.ac.uk](mailto:s.naz@hud.ac.uk) .

Could you please fill the form attached and return it back to address written.

Thanking you

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## APPENDIX B: CONSENT FORM

Dear Sajida Naz,

I am willing/not willing to take part in your project. I understand the aims and objectives of this research clearly. I understand that my interview will be audio taped. I know my right to withdraw from the study at any stage.

Name: \_\_\_\_\_ (optional)

Signature: \_\_\_\_\_

Dated: \_\_\_\_\_

## APPENDIX C: INTERVIEW GUIDE

### Aims of the study

1. To explore impact of negative experiences on general mental health
2. What are the emotional “triggers” which can potentially instigate violent response?
3. To understand how the psychological testing techniques can best utilised to improve mental health and wellbeing of officers on duty

### Brief Introduction

First Name (optional) \_\_\_\_\_

Age (DOB) \_\_\_\_\_

People you look after (Family details) \_\_\_\_\_

Description about current Job and duties \_\_\_\_\_

Date of joining police force \_\_\_\_\_

1. Please introduced yourself
2. Your experience in policing so far
3. Stress related experiences you have faced during your work

Why you have considered joining police force?

Probe for factors such as

- Who recommended (if)
- Benefits
- Motives
- Status/ public popularity and respect
- Prior knowledge about police force before joining
- Knowledge about risk associated with Job

Experience in Police work

Briefly tell about your work experience so far with police force

Probe for

- Encounters
- Frequency of encounters
- Type of encounter
- Severity of encounter
- How dealt with encounter

Any experience/s which was/were emotionally demanding for you?

Probe for specific emotions/ feelings attached with experience

Why the experience was negative?

How you dealt with it?

How much time it has been since that particular event (if)?

What are particular aspects of the event you still recall and feel bad about?

Probe for content.

Personal psychological growth and wellbeing

How do you feel about your current profession?

Are you satisfied with police work as a profession (reference to their own current duties?)

Probe upon dissatisfaction

What are some of the risks you feel are there with your work?

Physical Threats?

Psychological/social threats?

Your perception about your duties and position??

Social adjustment issues

Peer support perception

APPENDIX D: RESILIENCE SCALES

**Connor-Davidson Resilience Scale**

Urdu Version (Sajida Naz, 2011)

پچھلے ایک ماہ میں آپ نے جیسا محسوس کیا ہے اس کے مطابق ہر سوال کے درست جواب کے سامنے X لکھیے اور اگر آپ کے ساتھ ایسی کوئی بات نہیں ہوئی تو بھی اپنی سمجھ کے مطابق ایسی صورت میں آپ کا جو جواب ہوتا وہ لکھئے

نمبر شمار	سوال	بالکل غلط	شاذ و نادر ہی درست	کسی حد تک درست	اکثر درست	تقریباً مکمل درست
1	میں تبدیلیوں کے ساتھ ڈھلنے کی صلاحیت رکھتا / رکھتی ہوں					
2	میرے پاس کم از کم ایک ایسا قریب اور محفوظ رشتہ ہے جو ذہنی دباؤ کی صورت میں میری مدد کرتا / کرتی ہے					
3	بعض اوقات میرے مسائل کا کوئی اور حل نہیں ہوتا تو خدا اور قسمت میری مدد کر سکتے ہیں					
4	میں اپنے سامنے آنے والی کسی بھی مشکل سے نمٹ سکتا / سکتی ہوں					
5	پچھلی کامیابیاں مجھے آگے آنے والی مشکلات اور آزمائشوں میں حوصلہ فراہم کرتی ہیں					
6	جب میرا سامنا مشکلات سے ہوتا ہے تو میں ان کے دلچسپی کے پہلوؤں کو دیکھنے کی کوشش کرتا / کرتی ہوں					
7	ذہنی دباؤ سے چھٹکارا پالینے پر میں مضبوط تر محسوس کر سکتا / سکتی ہوں					
8	کسی بیماری، زخمی حالت یا مشکلات کے بعد جلد ہی بہتری کی طرف راغب ہو جاتا / جاتی ہوں					
9	میرا یقین ہے کہ چاہے اچھا ہو یا برا، کچھ بھی بلا وجہ نہیں ہوتا					
10	نتیجہ کچھ بھی ہو لیکن میں اپنی طرف سے بھرپور کوشش کرتا / کرتی ہوں					
11	مجھے اعتماد ہے کہ میں مشکلات کے باوجود اپنے مقاصد حاصل کر سکتا / سکتی ہوں					
12	ناممکن نظر آنے والے معاملات میں بھی میں امید کا دامن ہاتھ سے نہیں					

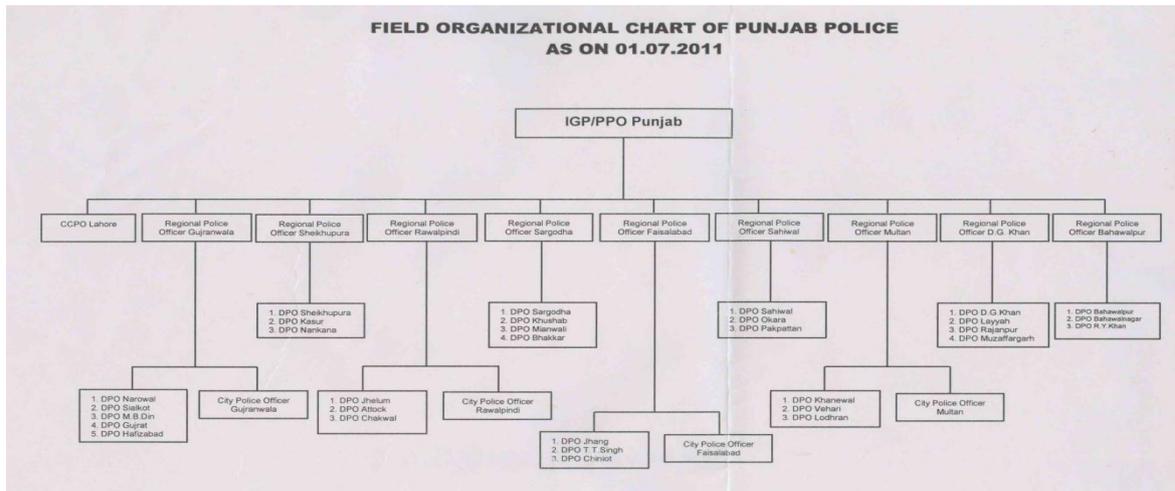
					چھوڑتا / چھوڑتی	
					ذہنی دباؤ یا کسی مشکل کی صورت میں مجھے معلوم ہوتا ہے کہ میں کہاں سے مدد حاصل کر سکتا / سکتی ہوں	13
					دباؤ کی صورت میں میری توجہ مقصد پر قائم رہتی ہے اور درست سمت میں سوچتا / سوچتی ہوں	14
					میں دوسروں کی طرف سے فیصلہ کرنے کی بجائے مسائل کے حل خود تلاش کرنے کو زیادہ مناسب سمجھتا / سمجھتی ہوں	15

## Connor-Davidson Resilience Scale

Urdu Version (Sajida Naz, 2011)

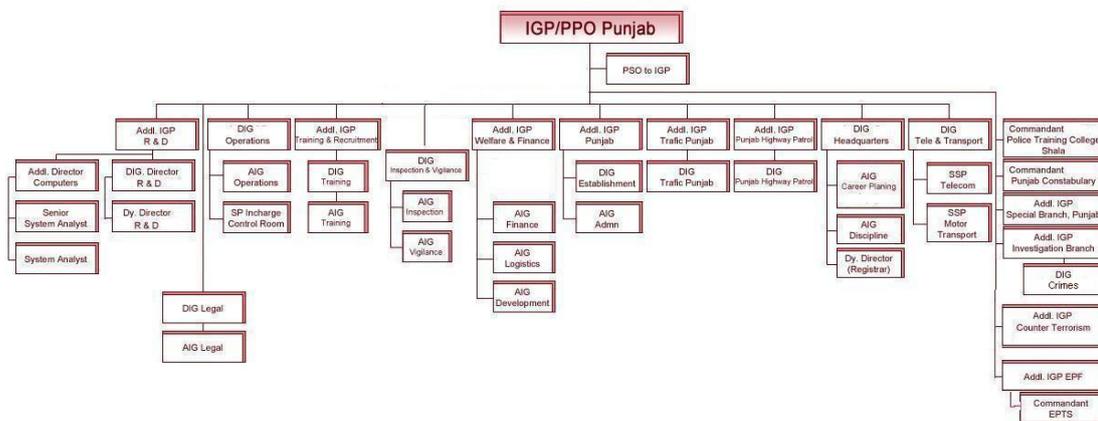
نمبر شمار	سوال	بالکل غلط	شاذ و نادر ہی درست	کسی حد تک درست	اکثر درست	تقریباً مکمل درست
16	میں آسانی سے ناکامیوں کی وجہ سے ہار ماننے والا / والی نہیں					
17	میں زندگی کی مشکلات اور آزمائشوں کے سامنا کرتے وقت خود کو مضبوط تصور کرتا / کرتی ہوں					
18	ضرورت پڑنے پر میں ایسے مشکل اور غیر مقبول فیصلے کر سکتا / سکتی ہوں جو دوسروں پر اثر انداز ہوں					
19	میں ناخوشگوار اور تکلیف دہ احساسات مثلاً اداسی، خوف، اور غصہ پر قابو پا سکتا / سکتی ہوں					
20	زندگی کے مسائل حل کرتے وقت بعض اوقات اندازے کا سہارا لینا پڑتا ہے					
21	میں یہ سمجھتا / سمجھتی ہوں کہ زندگی کا ایک خاص مقصد ہے					
22	مجھے اپنی زندگی کے معاملات پر قابو حاصل ہے					
23	مجھے چیلنجز پسند ہیں					
24	چاہے جتنی مشکلات ہوں میں اپنا مقصد حاصل کرنے کی جستجو کرتا / کرتی ہوں					
25	مجھے اپنی کامیابیوں پر فخر ہے					

## APPENDIX E: PAKISTAN POLICE ORGANISATIONAL CHART



## PAKISTAN POLICE ORGANOGRAM

Organizational Chart of Central Police Office Punjab As on 01-07-2011



## APPENDIX F: LETTER OF AUTHORISATION



### LETTER OF AUTHORISATION

HG/KT

24 March 2009

**To whom it may concern:**

**Re: Ms Sajida Naz – PhD Candidate  
Psychological Assessment of Police Officers**

Ms Sajida Naz, the holder of this letter, is a registered student of the University of Huddersfield where she is pursuing a doctorate on the above topic within the Centre for Applied Psychological Research. Ms Naz is authorised by the University of Huddersfield to carry out research pertaining to her PhD and I would be grateful for any assistance you may be able to offer her.

The nature of Ms Naz's research means that she will be working with police and security agencies in the UK and Pakistan, and will require access to relevant personnel within those organisations.

Ms Naz is an able, efficient and highly competent student. Her research will be carried out with the utmost regard for confidentiality and in accordance with strict ethical principles as required by the University of Huddersfield and any other relevant bodies as may be necessary.

If you require any further information in relation to this authorisation letter, please do not hesitate to contact me.

Yours sincerely

**Dr Helen Gavin C. Psychol, C.Sci, AFBPsS**  
Research Development Co-ordinator  
Centre for Applied Psychological Research  
Email: H.Gavin@hud.ac.uk  
Direct Tel: +44 (0)1484 472789



Queensgate Huddersfield HD1 3DH UK Telephone +44 (0) 1484 422288 Fax +44 (0) 1484 516151

Vice-Chancellor: Professor Bob Cryan BSc MBA PhD DSc

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## APPENDIX G: OFFICIAL LETTERS

Date 15-07-2009

Honourable Inspector General of Police (Punjab)

Mr. Tariq Saleem Dogar

Lahore Pakistan

Dear Sir,

I am studying at the University of Huddersfield under the supervision of Dr. Helen Gavin and Prof. Alex Hirschfield. I am conducting research on traumatic experiences of police officers and their emotional reactions to those events (critical incidents). I am seeking your approval to conduct this study on selected police officers of your department. This study is part of my PhD thesis.

The research project is a cross sectional study sponsored by The University of Huddersfield and Fatima Jinnah Women University, Pakistan. The goal is to identify policy making decisions for routine based psychological assessment of police officers by identifying potential impact of dealing with critical incidents. The research aims to understand how perception of an experience can affect its emotional response while working in critical positions. The study also combines data from Pakistani Police force (Punjab Police, Pakistan) and West Yorkshire Police UK, to observe ethnic differences in this regard.

This study has been cleared by the ethics committee of the School of Human and Health Sciences (The University of Huddersfield) in accordance with the British Psychological Society's ethical guidelines. Please feel free to contact Dr Helen Gavin, my research supervisor, whose authority letter is attached as "Annex A" about the research project.

If you agree I will work with you to identify police personnel for the research purpose. The study will require participation at two sessions. In the beginning selected senior police personnel (working on critical situations) will be required to have a face to face in depth interview with researcher on objectives stated afore. This procedure will be carried out in police departments of both countries (UK and Pakistan). The Second session would include survey using self developed questionnaire.

The confidentiality and anonymity of participation and responses will be fully respected. All information will be safely secured. Identity of participants will not be revealed at any stage (or after) of this research. In addition, they will have right to withdraw from the research any time.

I have attached fact sheet (Annex B) of the project for more details. I believe that this study will benefit the police personnel of both countries. Together we can learn how to improve general wellbeing of personnel by adopting appropriate assessment procedures. I

would appreciate any input that helps make this a successful project. I look forward to you concerning this request.

Sajida Naz

Doctoral Research Student

School of Human and Health Sciences

The University of Huddersfield, UK

Email: [s.naz@hud.ac.uk](mailto:s.naz@hud.ac.uk)

Phone (office): + 44 (0)1484 471241

Cell: +44 7943676686

APPENDIX H: TRAUMA SCALE

TRAUMA QUESTIONNAIRE

## سوالنامہ برائے ذہنی افزائش، پولیس افسران

ID No. ....

محترم جناب / محترمہ!-----

میرانا م ساجدہ ناز ہے اور میں پولیس جوانوں میں پیشہ ورانہ ذمہ داریوں کی ادائیگی کے دوران پیش آنے والے حساس واقعات کے ذہنی دباؤ اور اس کے اثرات پر تحقیق کر رہی ہوں۔ یہ تحقیق میری PhD کا حصہ ہے اور آپ کی طرف سے حاصل ہونے والی تمام معلومات صیغہ راز میں رکھی جائیں گی اور صرف اور صرف تحقیق کے حوالے سے استعمال کی جائیں گی۔

جیسا کہ آپ نے محسوس کیا ہوگا کہ ڈیوٹی / تفتیش کے دوران اکثر حساس نوعیت کے واقعات رونما ہوتے ہیں مثال کے طور پر مردہ جسم کے ٹکڑے اکٹھے کرنا، دوران تفتیش ناپسندیدہ منظر کا دیکھنا، مزاہمتی جھڑپ میں حصہ لینا وغیرہ جن کی وجہ سے ذہنی دباؤ پیدا ہو جانے کا خدشہ ہوتا ہے۔ بین الاقوامی تحقیق سے یہ ثابت ہوتا ہے کہ ایسے واقعات سے مسلسل واسطہ رکھنے والے افراد اگر اپنی ذہنی اور جسمانی صحت کا خیال نہ رکھیں تو بے شمار نفسیاتی مسائل پیدا ہو سکتے ہیں جو آگے چل کر ان کے فیزی اور نفسی زندگی میں خلل پیدا کرنے کا باعث بھی بن سکتے ہیں۔

درج ذیل سوالنامہ آپ کی ڈیوٹی کے دوران پیش آنے والے ایسے واقعات سے متعلق ہے جو کسی بھی طرح آپ کی زندگی پر اثر انداز ہوئے ہوں۔ میں آپ سے مکمل تعاون کی امید رکھتی ہوں۔ آپ کی مدد سے ہم پاکستانی پولیس کی نفسیاتی صحت کے حوالے سے مؤثر طریقہ کار وضع کر سکتے ہیں۔

آنے والے صفحات میں مختلف نوعیت کے سوالات ہیں۔ محکمانہ ذمہ داریوں کی ادائیگی کے دوران اگر آپ کو کوئی ایسا واقعہ پیش آیا ہو یا آپ نے دیکھا ہو جس نے آپ کو وقتی یا دیر پا طور پر اثر انداز کیا ہو تو انہیں ذہن میں رکھتے ہوئے ذاتی تجربے کی بنیاد پر مندرجہ ذیل سوالات کے جوابات دیجیے۔ یہ سوالنامہ تقریباً 15 سے 20 منٹ میں مکمل ہو سکتا ہے۔

مجھے اُمید ہے کہ آپ کا تعاون پاکستانی پولیس کی نفسیاتی صحت کے حوالے سےقلیدی کردار ادا کرے گا۔

شکریہ

اس سوالنامے یا تحقیق سے متعلق کسی بھی قسم کے سوالات پر آپ مجھے درج ذیل پتے پر رابطہ کر سکتے ہیں۔

sajida.naz@gmail.com

c/o

Maj. Safdar H. Sajid

House No. E-1011/4-A,

Street No. 9 Shahid Town,

Defence Ghazi Road, Lahore Cantt.

میں نے یہ تعارفی خط پڑھ لیا ہے اور اس کو اچھی طرح سمجھ لیا ہے۔ میں جانتا/جانتی ہوں کہ یہ معلومات محض ریسرچ کے لئے ہیں اور کسی دوسرے مقصد کے لئے استعمال نہ ہوگی۔

دستخط



## سکیشن 2

- 1- درج ذیل سوالات آپ کی سروس کے دوران پیش آنے والے ناخوشگوار واقعات سے متعلق ہیں۔ برائے مہربانی پچھلے 6 ماہ کے دوران پیش آنے والے ان واقعات اور ان کی وجہ سے آپ پر ہونے والے ذاتی اثرات تحریر کیجیے۔

اس کا ذاتی نفسیاتی دباؤ				کتنی باریہ واقعہ آپ نے دیکھا			
زیادہ	درمیانی حد تک	تھوڑا بہت پریشان	کوئی اثر نہیں	10 سے	5 سے	2 سے	نہیں دیکھا
				10 مرتبہ زیادہ مرتبہ	10 مرتبہ	4 مرتبہ	
							جسم کے جلے ہوئے حصے دیکھنا
							مقتول بچے کی نعش دیکھنا
							بالغ مقتول کی نعش دیکھنا
							جسم کے کٹے ہوئے ٹکڑے دیکھنا
							انتہائی تشویشناک حالت کے افراد کو ملنا یا دیکھنا
							حادثاتی اموات کا دیکھنا
							مرنے والے سے آپ کا کوئی ذاتی تعلق
							ایسے مقتول یا زخمی کو دیکھنا جس کے آپ کے فیملی یا رشتہ داروں سے مشابہت ہو
							متعدد اموات
							ایک ہی خاندان کے متعدد افراد کی نعشیں دیکھنا؟

								کسی واقعہ پر میڈیا کی طرف سے تنقید کا سامنا
								نا خوشگوار یوں نے کسی واقعہ کی یاد دلانی ہو
								مشغول افراد کو قابو میں کرنا

سیکشن 3

1- درج ذیل سوالات آپ کے مذہبی رجحانات سے متعلق ہیں درست جواب کا انتخاب کیجیے۔

1.1 میں مذہبی عبادات باقاعدگی

سے ادا کرتا ہوں / کرتی ہوں۔

1.2 میں زیادہ تر کسی مشکل کے وقت

ہی عبادت کرتا / کرتی ہوں

1.3 میں سالانہ تہوار مثلاً عید /

کرسمس / دیوالی وغیرہ کے موقع پر ہی

عبادت کرتا ہوں / کرتی ہوں۔

2: میں مذہبی نہیں

3- دیگر..... (تفصیل)

4- آپ کے مذہبی عقیدے کا آپ کی روزمرہ زندگی ارویہ پر کیا اثر ہوتا ہے۔

مکمل اثر

کوئی اثر نہیں

میں مذہبی عقائد پر یقین نہیں رکھتا

تھوڑا بہت



					7- میں متاثرہ خاندان / لواحقین کے ساتھ ذاتی طور پر ہمدردی محسوس کرتا ہوں / کرتی ہوں اور ڈیوٹی سے ہٹ کر بھی ذاتی مدد کرتا ہوں
--	--	--	--	--	--

سیکشن 5

درست جواب کی نشاندہی کریں۔

کبھی نہیں	کبھی کبھار	اکثر اوقات	ہمیشہ	
				1- مجھے دوستوں سے میل جول پسند ہے۔
				2- مجھے اگر کوئی پریشانی ہو تو میرے دوست احباب مدد کو تیار رہتے ہیں۔
				3- میرے گھر والے مجھ سے انتہائی محبت کرتے ہیں۔
				4- اگر میں اپنی پریشانی کسی کو بتا دوں تو ہلکا محسوس کرتا ہوں / کرتی ہوں
				5- میرے خیال میں میرے گھر والے میرے دفتری پریشانیوں کو نہیں سمجھ پاتے
				6- لوگ مجھ پر اعتبار کرتے ہیں۔
				7- لوگ مجھے بطور پولیس آفیسر عزت دیتے ہیں۔
				8- مجھے اپنے سینئر افسران سے کوفت محسوس ہوتی ہے
				9- میں اپنی پریشانی کا اظہار اپنے دفتری ارکان / دوستوں سے کر سکتا ہوں / سکتی ہوں۔



- 10- مجھے لوگوں میں گھلنا ملنا پسند ہے۔
- 11- میرے گھر والے میری عزت کرتے ہیں۔
- 12- میں گھر والوں کے ساتھ باہر تفریح کے لئے جاتا / جاتی ہوں۔
- 13- میں مزاح کے ذریعے اپنی پریشانی کو کم کر لیتا / لیتی ہوں۔
- 14- میرا دین / ایمان مجھے مضبوطی اور ہمت عطا کرتا ہے۔
- 15- میں دفتری پریشانی / دباؤ کو برداشت کر لیتا ہوں۔
- 16- دوران سروس دی گئی ٹریننگ / تجربے سے مجھے ذہنی صحت کے متعلق شناسائی حاصل ہوتی ہے۔
- 17- میرے خیال میں دفتری دباؤ کی وجہ سے میری نجی زندگی متاثر ہو رہی ہے۔

## English Version

### Section 1: Personal Stories of Incident Encounters

Please briefly describe any work related incident/event you have seen which was significantly unpleasant for you. Please mention the date when this incident happened.

Please describe what was unpleasant in that particular event for you

What do you think you could have done better or what could be improved in that particular case/investigation?

Have you ever received injuries while on duty?

Yes

No

What was the degree of damage caused by the injury?

First Degree (Hospitalized)

Second Degree (Major but not hospitalized)

Third Degree (Minor Injuries)

### Section 2: Traumatic Incident Exposure in Police

Please rate the following:

<b>Trauma Event</b>	<b>Event did not occur</b>	<b>Occurred but once or twice during this time</b>	<b>Once or twice in a month</b>	<b>About one in every two weeks</b>	<b>Event occurred most frequency</b>
Burns/Scars					
Dead body of a child					
Dead body of an adult					
Body parts					
Attended someone dying					
Accidental deaths					
Victim was known to you					
Any event which reminded you of someone					
Multiple deaths (less than					

six)					
Deaths of most family members in an accident					
Media criticism about some case					
Strong unpleasant smell which reminded you of some previous event					
Dealing with violent crowd					
Time urgency in investigation of a case					
Murder scene investigation					
Child Rape					
Adult Rape					
Serious Assault					
Self Injury					
Exchange of fire in a criminal combat					
On duty death of a colleague					
Dealing with emotionally disturbed victims/families					
Incomplete investigations/unresolved cases					
Any event whose sight, smell or sound was disturbing					
Dealing with child witness or victims					
Dealing with terror investigation					
Public riot					
Multiple deaths involving families (less than six)					
Traffic/Road Accident					

Other					
-------	--	--	--	--	--

How much this event had an impact on you?

<b>Trauma Event</b>	<b>None</b>	<b>A little bit</b>	<b>Moderate</b>	<b>Large</b>	<b>Extreme</b>
Burns/Scars					
Dead body of a child					
Dead body of an adult					
Body parts					
Attended someone dying					
Accidental deaths					
Victim was known to you					
Any event which reminded you of someone					
Multiple deaths (less than six)					
Deaths of most family members in an accident					
Media criticism about some case					
Strong unpleasant smell which reminded you of some previous event					
Dealing with violent crowd					
Time urgency in investigation of a case					
Murder scene investigation					
Child Rape					
Adult Rape					
Serious Assault					
Self Injury					
Exchange of fire in a criminal combat					

On duty death of a colleague					
Dealing with emotionally disturbed victims/families					
Incomplete investigations/unresolved cases					
Any event whose sight, smell or sound was disturbing					
Dealing with child witness or victims					
Dealing with terror investigation					
Public riot					
Multiple deaths involving families (less than six)					
Traffic/Road Accident					
Other					

Please write the incident which you have seen, but not listed above (you can still rate that incident in last option indicated above)

### Section 3: Religious Orientation

Which of the following describes your religious practices?

- I attend religious services regularly
- I pray when I am stressed, or I have need, otherwise I am not religious
- I pray on certain religious occasions, or when there is a formal gathering (such as Eid, Christmas, Deewali etc)
- I am not religious
- Other (*please specify*):

How much influence does your religious belief have on your behaviour?

- No Influence
- A small influence
- Some Influence
- A lot of Influence
- Complete Influence
- I don't believe in religious practises
- Other (*please specify*)

**Section 4: Psychological Trauma Management**

**EMOTIONAL REACTIVITY**

Please rate the following statements which describe you best.

<b>Categories</b>	<b>Always</b>	<b>Most of the times</b>	<b>Don` t know</b>	<b>Sometimes</b>	<b>Not at all</b>
I will work extra hours to solve the case.					
When an investigation is over, it is gone. I never think about it.					
I try not to think about any incident which is painful.					
It is difficult for to deal with feelings caused by disturbing events.					
I think about disturbing incident.					
I get disturbed when I see the sufferings of victim`s families.					
I try not to become emotionally involved with the family of the victims					
I think I become over involved with the victim`s families even after the case is solved.					

**COPING APPROACHES**

Please rate the following:

	<b>Always</b>	<b>Most of the times</b>	<b>Sometimes</b>	<b>Never</b>
I enjoy meeting with my friends				
My friends are helpful when I am experiencing some				

problem				
I have a loving and caring family				
It helps me a lot if I can discuss the issues I am having with someone				
I think my family is not understanding in terms of my professional life				
I feel respected by my community				
I feel that people respect me as a police officer				
I feel little uneasy with my manager				
I can share my concerns to my colleagues				
I can discuss my concerns with my manager				
I like to go to social gatherings				
My family gives me respect				
I go out with my family				
I use humour to help me cope				
My faith gives me support and strength				
I can manage the stress at work				
Ongoing training has helped me to understand my psychological needs				

I think that the work pressure is affecting my home life				
--	--	--	--	--

**Section 5: Psychological Support**

At some point in your service so far, have you ever felt need to speak to some expert about your psychological health?

- Yes
- No

If YES: Please describe the details:

Who would you seek help from if you had a psychological problem?

- A Psychologist
- A Psychiatrist
- A Medical Doctor
- Discuss with family
- Discuss with friends
- Discuss with my manager
- I can manage myself
- Other (*please specify*):

Have you ever consulted a psychologist before?

- Yes
- No

What was the nature of complaint?

Was the consultation helpful? Please describe

Have you ever attended the Critical Incident Stress Debriefing?

- Yes
- No

Have you done any course(s) related to managing mental health?

- Yes
- No

Please describe some details of the courses you have completed

### **Section 6: Demographic information**

I am:

1. Male
2. Female

Your Age (in years)?

What is your marital Status?

- Married with children
- Married, but no children
- Single with children
- Unmarried
- Divorced
- Widow
- Other (*please specify*):

1. How long have you been serving in Police?
2. What is your current rank?
3. What is your family size (how many people live in your home)
4. What is your total monthly income (from all sources)?
5. How much is the saving (if any)?
6. Any outstanding loan?
  - Yes
  - No

Why did you join the police force?

- I was inspired by a member of my family
- It was my passion since i was a child
- It was just a coincidence
- I like the uniform
- I was inspired by the dignity of the role of a police officer
- It was not my choice
- I want to protect people
- It is a permanent position and has several benefits
- Any other
- Other (*please specify*):

How much satisfied you are with present job?

Extremely Satisfied	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Extremely Dissatisfied
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How satisfied you are with the current privileges and facilities you get from your job?

Extremely Satisfied	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Extremely Dissatisfied
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## APPENDIX I: CONTRACT

### CONTRACT FOR RECRUITMENT AS RESEARCH ASSISTANT

This agreement is made on the 01<sup>st</sup> day of May 2010, between Mr. Safdar Hussain Sajid, son of Ghulam Hussain, and Ms. Sajida Naz, PhD Scholar at University of Huddersfield for the recruitment in a research project entitled: *Police and Psychological Trauma: a cross-cultural, mixed methodological study of how police cope with the psychological consequences of their work*, to serve as a research assistant until 30<sup>th</sup> August 2010.

You are hired as a research assistant from 01 May 2012 until 30<sup>th</sup> August 2010, under following terms and conditions:

#### Terms and Conditions

1. You are entitled to payment of PKR 15000 for the said time period.
2. You must abide by the research ethics including confidentiality and anonymity in data handling and distribution.
3. Your work requires distribution of survey questionnaires to respective authorities and collection of filled forms during the suggested time period.
4. You must not disseminate or detail any of the research items without consulting the principal researcher.
5. You must not violate the copyrights for the questionnaire.
6. You must ensure safe distribution and collection of the questionnaires and document exact number of questionnaires sent and received.
7. You must return incomplete survey questionnaires to the principal investigator.
8. You are not permitted to photocopy or distribute the questionnaire unnecessarily without prior permission from Principal Investigator.
9. This contract is limited to three month and you must adhere to the time scale.

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**Ms. Sajida Naz**  
Principal Investigator

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**Mr. Safdar Hussain Sajid**  
Research Assistant

## APPENDIX J: AGREEMENT FROM WYP



### *DATA PROCESSING AGREEMENT*

THIS AGREEMENT is made the 6th day of September 2010

BETWEEN

#### **1.0 The Parties**

1.1 The Chief Constable of *West Yorkshire Police* (herein after called the “Data Controller”) *PO Box 9 Laburnum Road, Wakefield, WF1 3QP of the one part and Sajida Naz* (herein after called the “Data Processor”), Centre of Applied Psychology, School of Human and Health Sciences, Huddersfield University, Queensgate, Huddersfield, West Yorkshire, HD1 3DH of the other part.

#### **2.0 Purpose**

2.1 The purpose of the disclosure is to support research (large scale survey) into the effects of conducting major/traumatic investigations on officers. This will require the provision of a de-personalised HR file that provides, for each police officer, their gender, rank, age and length of service for Sajida to draw a sample of officers to send a survey form to explore their views/experiences

2.2 This Agreement sets out the terms and conditions under which Data held by the Data Controller will be disclosed to the Data Processor. This Agreement is entered into with the purpose of ensuring compliance with the Data Protection Act 1998 (“the Act”). Any processing of data must comply with the provisions of this Act.

2.3 The Processing of Data for the Purpose will assist the Data Controller to fulfil his obligations contained within the research proposal and achieve the associated benefits to the understanding of the effect of conducting major/traumatic investigations on officers.

### 3.0 Definitions

3.1 The following words and phrases used in this Agreement shall have the following meanings except where the context otherwise requires:

3.2 The expressions “**Data**”, “**Data Controller**”, “**Data Processor**”, “**Personal Data**”, “**Sensitive Personal Data**”, “**Processing**”, “**Information Commissioner**”, “**Data Subject Access**” have the same meaning as in Sections 1, 2, and 6 of The Data Protection Act 1998, as amended by The Freedom of Information Act 2000.

3.3 “**Test Data**” means any Data including ‘Personal Data’ and ‘Sensitive Personal Data’ as above provided by the Data Controller to the Data Processor and as identified in the schedule at Appendix A.

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3.4 “**Aggregated Data**” means Data grouped together to the extent that no living individual can be identified from that Aggregated Data or any other Data in the possession of, or likely to come into the possession of any person obtaining the Aggregated Data.

3.5 **A.C.P.O.** means the Association of Chief Police Officers.

3.6 The “**Project Manager**” means Sajida Naz on behalf of the Data Processor or such other person as shall be notified by the Data Processor as appropriate.

3.7 “**Government Protective Marking Scheme**” means the scheme for the classification of information.

3.8 The “**Designated Police Manager**” means Jayne Sykes who will have responsibility for the management of the research on behalf of the Data Controller

- 3.9 **“Agreement”** means this Data Processing Agreement together with its Schedules and all other documents attached to or referred to as forming part of this agreement.
- 3.10 **“Confidential Information”** means any information relating to the Data Controller’s personnel, customers and prospective customers, current or projected financial or trading situations, business plans, business strategies, developments and all other information relating to the Data Controller’s business affairs including any trade secrets, know-how and any information of a confidential nature imparted by the Data Controller to the Data Processor during the term of this Agreement or coming into existence as a result of the Data Processor’s obligations, whether existing in hard copy form or otherwise, and whether disclosed orally or in writing. This definition shall include all Personal Data.
- 3.11 **“Services”** means the services to be provided by the Data Processor during the term of this Agreement, as described in Use, Disclosure and Publication.
- 3.12 Headings are inserted for convenience only and shall not affect the construction or interpretation of this Agreement and, unless otherwise stated, references to clauses and schedules are references to the clauses of and schedules to this Agreement;
- 3.13 Any reference to any enactment or statutory provision shall be deemed to include a reference to such enactment or statute as extended, re-enacted, consolidated, implemented or amended and to any subordinate legislation made under it; and
- 3.14 The word ‘including’ shall mean including without limitation or prejudice to the generality of any description, definition, term or phrase preceding that word, and the word ‘include’ and its derivatives shall be construed accordingly.

#### **4.0 Information provision**

4.1 It is recognised that the Purpose requires access to the Data, which has been previously protectively marked by the Data Controller, up to and including confidential, under the Government Protective Marking Scheme.

4.2 The Data will be provided over a set time period as agreed by both parties and identified in the Appendix A

4.3 Ownership of the Data shall at all times remain with the Data Controller.

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4.4 The Data will be delivered to the Data Processor in accordance with the GPMS. The data will be encrypted with the Password sent in a separate communication

4.5 This information **WILL NOT** under any circumstances be published without prior written approval from the chief constable of West Yorkshire Police to ensure there is no harm in the way the information is being presented.

## **5.0 Use, Disclosure and Publication**

5.1 The Data will be used solely for the Purpose.

5.2 The Data shall not at any time be copied, broadcast or disseminated to any other third parties, except in accordance with this Data Processing Agreement.

5.3 A copy of the Data can be made to provide an effective backup and recovery mechanism to secure the Data.

5.4 Data will NOT be matched with any other Personal Data otherwise obtained from the Data Controller, or any other source, unless specifically authorised in writing by the Data Controller.

5.5 Data will NOT be disclosed to any third party without the written authority of the Data Controller

5.6 Access to the Data will be restricted to those employees of the Data Processor directly involved in the processing of the Data in pursuance of the Purpose who have signed the Undertaking of Confidentiality in Appendix B and are approved by the Data Controller. The Data Processor will have full responsibility for the notification of new employees to the Data Controller.

5.4 No steps will be taken by the Data Processor to contact any Data Subject identified in the Data.

5.5 Personal Data used will not be published in identifiable form unless the persons concerned have given their consent and in conformity with other safeguards laid down by domestic law.

## **6.0 Data Protection and Human Rights**

- 6.1 The use and disclosure of any Personal Data shall be in accordance with the obligations imposed upon the Parties to this Agreement by the Data Protection Act 1998 and the Human Rights Act 1998. All relevant codes of practice or data protection operating rules adopted by the Parties will also reflect the data protection practices of each of the parties to this Agreement.
- 6.2 The Parties agree and declare that the information accessed pursuant to this Agreement will be used and processed with regard to the rights and freedoms enshrined within the European Convention on Human Rights. Further, the Parties agree and declare that the provision of information is proportional, having regard to the purposes of the Agreement and the steps taken in respect of maintaining a high degree of security and confidentiality.
- 6.3 The Parties undertake to comply with the provisions of the Data Protection Act 1998 and to notify as required any particulars as may be required to the Information Commissioner.
- 6.4 If any Party receives a request under the subject access provisions of the Data Protection Act 1998 and personal data is identified as belonging to another Party, the receiving Party will contact the other Party to determine if the latter wishes to claim an exemption under the provisions of the Act.
- 6.5 It is acknowledged that where a Data Controller cannot comply with a request without disclosing information relating to another individual who can be identified from that information, he is not obliged to comply with the request, unless;
- a) the other individual has consented to the disclosure of the information to the person making the request; or
  - b) it is reasonable in all the circumstances to comply with the request without the consent of the other individual. In determining whether it is reasonable, regard shall be had, in particular, to:-
    - any duty of confidentiality owed to the other individual;
    - any steps taken by the data controller with a view to seeking consent of the other individual;
    - whether the other individual is capable of giving consent;
    - any express refusal of consent by the other individual.

- 6.6 Where the Data Processor receives a request for information under the provisions of the Freedom of Information Act 2000 in respect of information provided by or relating to the Data Controller, the Data Processor will contact the person nominated below to ascertain whether the Data Controller wishes to claim any exemption including the determination of whether or not the Data Controller wishes to issue a response neither to confirm nor deny that information is held.
- 6.7 Where any Party receives a Notice under Section 10 of the Data Protection Act 1998, that Party will contact the person nominated below to ascertain whether or not to comply with that Notice.
- 6.8 The Data Processor shall give reasonable assistance as is necessary to the Data Controller in order to enable him to:
- Comply with request for subject access from the Data Subjects;
  - Respond to Information Notices served upon him by the Information Commissioner;
  - Respond to complaints from Data Subjects;
  - Investigate any breach or alleged breach of the Act.

in accordance with his statutory obligations under the Data Protection Act 1998.

- 6.9 On reasonable notice, periodic checks may be conducted by the Data Controller to confirm compliance with this Agreement.

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- 6.10 The following personnel are authorised by the Parties to assume responsibility for Data Protection compliance, notification, security, confidentiality, audit and co-ordination of subject rights and Freedom of Information:

Data Protection Manager Police	D Mason	West Yorkshire
Project Leader - Information Security Police	K Gill	West Yorkshire
Head of Performance Review	J Sykes	West Yorkshire Police

## **7.0 Confidentiality**

- 7.1 The Data Processor shall not use or divulge or communicate to any person (other than those whose province it is to know the same for the Purpose, or without the

prior written authority of the Data Controller) any Data obtained from the Data Controller, which it shall treat as private and confidential and safeguard accordingly.

- 7.2 The Data Processor shall ensure that any individuals involved in the Purpose and to whom Police Data is disclosed under this Agreement are aware of their responsibilities in connection with the use of that Police Data and have confirmed so by signing the Undertaking of Confidentiality Agreement (Appendix B)
- 7.3 For the avoidance of doubt, the obligations or the confidentiality imposed on the Parties by this Agreement shall continue in full force and effect after the expiry or termination of this Agreement.
- 7.4 Respect for the privacy of individuals will be afforded at all stages of the Purpose.
- 7.5 Where disclosure of the Police Data is ordered by a Court of competent jurisdiction, or subject to any exemption under the Act, where disclosure is required by a law enforcement agency or regulatory body or authority, or is required for the purposes of legal proceedings, in which case the Data Processor shall immediately notify the Data Controller in writing of any such requirement for disclosure of the Police Data in order to allow the Data Controller to make representations to the person or body making the requirement.
- 7.6 The restrictions contained in 7.1 shall cease to apply to any Data which may come into the public domain otherwise than through unauthorised disclosure by the Parties to the Agreement.

## **8.0 Retention, Review and Deletion.**

- 8.1 All Data will be retained by the Data Processor for a period not exceeding 1 month after the termination of the Agreement.
- 8.2 The Data Processor will be responsible for ensuring the Data is returned to the Data Controller after the above period of time has expired (if the project expires prior to this time the data will be returned immediately), for secure disposal. **The Data Processor will confirm in writing that all copies of the Data held on their systems have been securely destroyed / deleted.**

## 9.0 Security

- 9.1 The Data Processor recognises that the Data Controller has obligations relating to the security of Data in his control under the Data Protection Act 1998, ISO27001 and the ACPO Information Community Security Policy. The Data Processor will continue to apply those relevant obligations as detailed below on behalf of the Data Controller during the term of this Agreement.
- 9.2 The Data Processor agrees to apply appropriate security measures, commensurate with the requirements of principle 7 of the Data Protection Act 1998 to the Data, which states that: “appropriate technical and organisation measures shall be taken against unauthorised or unlawful processing of personal data and against accidental loss or destruction of, or damage to, personal data”. In particular, the Data Processor shall ensure that measures are in place to do everything reasonable to:
- make accidental compromise or damage unlikely during storage, handling, use, processing transmission or transport
  - deter deliberate compromise or opportunist attack, and
  - promote discretion in order to avoid unauthorised access
- 9.3 During the term of this Agreement, The Project Manager shall carry out any checks as are reasonably necessary to ensure that the above arrangements are not compromised.
- 9.4 The Data Controller may wish to undertake suitability checks on any persons having access to police premises and the Data and further reserves the right to issue instructions that particular individuals shall not be able to participate in the Purpose without reasons being given for this decision.
- 9.5 The Data Processor will ensure that the Data accessed is not used other than as identified within this agreement, and that the agreement is complied with.
- 9.6 Access to the Data will be confined to authorised persons only. These will be the individual researchers who have signed the Undertaking of Confidentiality (Appendix B)
- 9.7 When not in use, the data will be secured in a locked cabinet within a locked office, to which access will be controlled and supervised

- 9.8 Any security incidents, breaches and newly identified vulnerabilities must be reported to the Project Manager at the earliest opportunity via the form provided at (Appendix C) to this Agreement
- 9.9 The Data Controller reserves the right to undertake a review of security provided by any Data Processor and may request reasonable access during normal working hours to the Data Processor premises for this purpose. Failure to provide sufficient guarantees in respect of adequate security measures may result in the termination of this Agreement.
- 9.10 The Data Processor undertakes not to use the services of any sub-contractors in connection with the processing of the Data without the prior written approval of the Data Controller.
- 9.11 Any access to the premises used to process or store the Data by maintenance, repair contractors, cleaners or other non-authorised personnel **MUST** be closely supervised to ensure that there is **NO ACCESS** to the Data.

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## **10.0 Indemnity**

- 10.1 In consideration of the provision of the Data for the Purpose the Data Processor undertakes to indemnify and keep indemnified the Data Controller against any liability, which may be incurred by the Data Controller as a result of the Data Processor's breach of this Agreement.
- 10.2 Provided that this indemnity shall not apply:
- (a) where the liability arises from information supplied by the Data Controller which is shown to have been incomplete or incorrect, unless the Data Controller establishes that the error did not result from any wilful wrongdoing or negligence on his part

- (b) unless the Data Controller notifies the Data Processor as soon as possible of any action, claim or demand to which this indemnity applies, commits the Data Processor to deal with the action, claim or demand by settlement or otherwise and renders the Data Processor all reasonable assistance in so dealing;
- (c) to the extent that the Data Controller makes any admission which may be prejudicial to the defence of the action, claim or demand.

## **11.0 Disputes**

- 11.1 In the event of any dispute or difference arising between the Parties out of this Agreement, the designated police manager and the persons appointed by the Data Processor, shall meet in an effort to resolve the dispute or difference in good faith.
- 11.2 The Parties will, with the help of the Centre for Dispute Resolution, seek to resolve disputes between them by alternative dispute resolution. If the Parties fail to agree within 56 days of the initiation of the alternative dispute resolution procedure, then the Parties shall be at liberty to commence litigation.

## **12.0 Term, Termination and Variation**

- 12.1 The Data Controller may at any time by notice in writing terminate this Agreement forthwith if the Data Processor is in material breach of any obligation under this Agreement.
- 12.2 Either Party may terminate this Agreement by giving one months notice in writing to the other Party.
- 12.3 The Data Controller will have the final decision on any proposed variation to this Agreement. No variation of the Agreement shall be effective unless it is contained in a written instrument signed by both Parties and annexed to this Agreement.

## **13.0 Miscellaneous**

- 13.1 This Agreement acts in fulfilment of part of the responsibilities of the Data Controller as required by paragraphs 11 and 12 of Schedule 1, Part II of the Data Protection Act 1998.

13.2 This Agreement constitutes the entire agreement between the Parties as regards the subject matter hereof and supersedes all prior oral or written agreements regarding such subject matter.

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13.3 If any provision of this Agreement is held by a Court of competent jurisdiction to be invalid or unenforceable, such invalidity or unenforceability shall not affect the remaining provisions of this Agreement, which shall remain in full force and effect.

13.4 The validity, construction and interpretation of the Agreement and any determination of the performance which it requires shall be governed by the Laws of England and the Parties hereby submit to the exclusive jurisdiction of the English Courts.

<b>For and on behalf of the Data Controller</b>	<b>For and on behalf of the Data Processor</b>
Signature:	Signature:
Print name:	Print name:
Job Title:	Job Title:
Date:	Date:

APPENDIX A - *De-personalised file of West Yorkshire Police Officers*

**THIS SECTION SHOULD ONLY INCLUDE THE DATA TO BE PROVIDED BY WEST YORKSHIRE POLICE UNDER THIS AGREEMENT AND NOT DATA FROM OTHER AGENCIES.**

THE DATA WHICH SHOULD BE PROVIDED TO THE DATA PROCESSOR INCLUDE THE FOLLOWING;

Unique reference number

Gender

Rank

Age

Length of Service

**Include a list of the data fields to be provided to the Data Processor and ensure that you are satisfied there is a justifiable reason for this information to be shared based on the ‘need to know’ principle.**



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## Undertaking of Confidentiality

- I, ...Sajida Naz.....as an employee / representative of Centre of Applied Psychology, School of Human Health Sciences, Huddersfield University, Queensgate, Huddersfield, West Yorkshire, HD1 3DH (the Data Processor) involved in the work as defined in the Agreement between the West Yorkshire Police and the Data Processor to which this Undertaking is appended, hereby acknowledge the responsibilities arising from this Agreement.

I understand that my part in fulfilling the Purpose means that I may have access to the Data and that such access shall include

- a) reading or viewing of information held on computer or displayed by some other electronic means, or
- b) reading or viewing manually held information in written, verbal, printed or photographic form.

I undertake that; -

1. I shall not communicate to, nor discuss with any other person, the contents of the Data except to the Chief Constable of the West Yorkshire Police (the Data Controller) or an official representative.
2. I shall not retain, extract, copy or in any way use any Data to which I have been afforded access during the course of my duties for any other purpose.
3. I will only operate computer applications or manual systems that I have been trained to use. This training will include the requirements of the Data Protection Act 1998 which prescribes the way in which Personal Data may be obtained, stored and processed.
4. I will comply with the appropriate physical and system security procedures made known to me by the Data Controller or a representative.
5. I will act only under instructions from the Data Controller, or other official representative in the Processing of any Data.
6. I understand that the Data is subject to the provisions of the Data Protection Act 1998 and that by knowingly or recklessly acting outside the scope of this Agreement I may incur criminal and/or civil liabilities.
7. I undertake to seek advice and guidance from the Data Processor or other relevant official of the Data Controller in the event that I have any doubts or concerns about my responsibilities or the authorised use of the Data and/or Aggregate Data defined in the Agreement.

**I have read, understood and accept the above.**

Name (Please print)	SAJIDA NAZ
Position in Organisation / Company	PhD Researcher
Signature	
Date	06 September 2010



**WEST YORKSHIRE  
POLICE**

**SECURITY INCIDENT REPORT**

Department / Organisation reporting the incident		
Person reporting the incident	Name	
	Role	
	Email address	
	Telephone number	
Date report submitted		
Name of premises where incident occurred		
Address / Location of premises where incident occurred  (including post code)		
Date and time of incident  (or when it came to notice)		
Name of individual(s) responsible for		

the incident, if known.	
-------------------------	--

Details of the incident, including the type and format of any information assets that are/have been effected, and the classification of the information/data if appropriate :	
---	--

What existing procedures/policies are in place to prevent this from happening, (attach copies where possible) :
If appropriate, what new / amended procedures/policies will be implemented to prevent this from happening again, (attach copies where possible) :
Any further comments:

**Please return the completed document to: Kim Gill / Jayne Sykes, PO Box 9, Laburnum Road, Wakefield WF1 3QP**

Name	
Address / Location	
Email	
Contact Telephone Number	

**For West Yorkshire Police Information Security use only**

Date report received by Information Security Officer		
Personal data / information	YES	NO

effected?		
Date report received by Data Protection Manager		
File name of ISA / DPA		

Action Taken:
---------------

## Glossary

### *Police Officers*

The term police officer refers to the personnel serving with the police force.

### *Psychological Trauma*

A prolonged emotional or psychological harm

### *Resilience*

Ability to rebound after suffering from major loss

### *Coping*

Adaptation or adjustment to trauma

### *Vicarious Traumatization*

Trauma resulting from dealing with distressed victims and their families