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The interplay of Job stress and Post-traumatic stress  
disorder in the context of terrorism, and its effects on  
employee outcomes: The roles of individual and  
organisational resources

A thesis presented in partial fulfilment of  
the requirements for the degree of

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Fatima Ali Junaid  
ID Number: 14061868  
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## **Dedication**

This thesis is dedicated to my father, who lost his life in bomb blast while offering Friday prayers on 13<sup>th</sup> February 2015.

and

to all like him who have lost their lives in acts of terrorism, and to their families who are left with their irreplaceable loss.

May we all find peace.



# **The interplay of Job stress and Post Traumatic Stress Disorder in the context of terrorism, and its effects on employee outcomes: The roles of individual and organisational resources**

## **Abstract**

Terrorism is a scourge which has now spread across the globe. The events of the last few years in London, Paris, and other cities around the world highlight the fact that acts of terrorism cause deep trauma to those exposed to them. However, for some countries such as Pakistan, terrorism is an everyday reality. Living under on-going terrorism can be extremely stressful for employees, in that they have to deal with continuous risk in addition to the common stressors of professional and personal life. To date, however, there has been scant research into this phenomenon. This study was thus undertaken with two main objectives: 1) to understand the interplay between work stress and that caused by terrorism and its implications for employee outcomes; and 2) to determine whether personal and organisational resources such as psychological capital and perceived organisational support could help explain the influences of these stressors.

Pakistan was the setting for this research, as it has suffered from on-going terrorism for more than a decade, with nearly 50,000 civilians killed between 2003-2014. I have personally experienced on-going terrorism and its associated loss of life. The drive to understand the effects of this context was thus deeply felt and meaningful on a personal level. This research was challenging in many aspects, and I faced obstacles different to those presented by general management research, including conducting a study in a country where danger to life from terrorism was a real possibility. Aside from being emotionally taxing, the investigation involved ethical issues around the additional stress and trauma that could arise from the inquiry. Notwithstanding this, gaps in the literature and the practical need for the study could not be ignored.

Drawing on conservation of resources theory, a theoretical framework was developed. This suggested that if employees are stressed, they are likely to feel resource depletion. The source of stress could be caused by their job and/or terrorism. The constant nature of terrorism, however,

would likely further hinder employees from gaining psychological strength. For job stress, a challenge and hindrance stressors framework was used, and Post-Traumatic Stress Disorder (PTSD) was used as a lens through which to understand terrorism stress. Next, using positive psychology and organisational support theory, it was argued that viewing/ approaching/ utilising psychological capital as a psychological resource, and perceived organisational support as an organisation-based support resource may help to reduce the toll of the stressors on employees. This thesis comprises three studies and three data sets. First, it explored through a qualitative study the stressors of a job and terrorism, and their influence on employee outcomes, and determined the roles of personal and organisational resources. Next, a quantitative study was conducted to test some of these relationships. The first study had highlighted that there was a need to develop a contextual measure which required testing before conducting the final study.

Study One was based on the limited existing literature, and involved semi- structured interviews with 15 human resources (HR)/line managers. It aimed to gain knowledge about the influence of job and terrorism stress on employee outcomes, and the role of resources in helping reduce/explain the detrimental consequences. Thematic analyses highlighted several themes which were highly embedded in the context of on-going terrorism. The main themes concerned job stress, terrorism stress, organisational support in the context of terrorism, and employee outcomes of stressors of job and terrorism. Study One pointed out that the population at large was exposed to terrorist incidents, had suffered losses, and was likely to be traumatized. It also indicated that the organisational support needed by employees in the context of on-going terrorism was distinctly different than that which is conventionally observed in the literature as perceived organisational support (POS). For example, employees in the terrorism context wanted organisations to provide physical security such as armed guards with bullet proof jackets. There was no existing instrument that could be used to specifically measure this.

The second study was informed by the first and focused on developing a measure for the contextual POS; I called it Security-POS. This study had a sample of 146 Pakistani employees and used factor analysis. It confirmed that Security-POS is distinct from POS. Mediation analysis confirmed that Security-POS enhances POS, which in turn positively influences employee

outcomes and well-being. Drawing on the findings of the two studies, the third and final study was developed. The survey for this study was based on 416 Pakistani employees.

The studies conjointly found that job stressors and PTSD collectively had more dire effects on employee behaviours than did each stressor separately. PTSD itself was higher than any other comparable samples such as those from post 9/11 or Israeli populations. In contrast to the majority of extant research findings, challenge stressors were often not recognised as a challenge, and consequently became another burden for employees. More importantly, hindrance stressors were identified as being the most detrimental of all the stressors. Both POS and Security-related contextual POS helped in moderating the adverse effects of the stressor. Psychological capital also mediated and reduced the harmful effects of the stressors and PTSD.

This is constructed in the form of a ‘By Publication’ thesis wherein the most significant part of the thesis is presented in the form of stand-alone, but linked journal articles. Chapters 1 and 2 introduce the study and review the literature respectively, while Chapter 3 outlines the overall methodology of the research. Chapters 4 to 8 contain the five research articles (manuscripts). These chapters present one article or manuscript each as a complete, stand-alone piece, but collectively, are linked and based on the overall study. A brief outline of these five journal articles or manuscripts can be found below. Chapter 9 then provides an overall discussion of the study, its limitations, contributions and implications, and finally, a concluding section.

This study contributes in general to the literature of management science, and in particular to the areas of job stress and trauma, and even more specifically, to the development of conservation of resources theory, positive psychology, and organisational support theory. It was conducted in areas that were far flung and hard hit by terrorism. It presented voices which are otherwise not heard, and has implications for the well-being of the individual employees working in, and for organisations located in, the terrorism- afflicted area. However, beyond Pakistan and other terrorism-afflicted countries, this study has wider implications for international organisations and communities. According to the United Nations (2016), the number of international migrants has grown faster than the world’s population, reaching 244 million in 2015, a 41% increase since 2000. A large number of people continue to flee unsafe environments, not

only as refugees, but also as expatriates, students and skilled migrants. These individuals may not always be aware of the burdens of the stress and trauma that accompanies them, and nor may their new employment organisations and host countries. For the well-being of the workforce in various settings, it is thus critical that the effects of terrorism on employees and their organisations become better understood.

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## **List of Acronyms**

ANZAM	Australia New Zealand Academy of Management
APA	American Psychiatric Association
BBC	British Broadcasting Company
CIA	Central Intelligence Agency
CET	Cognitive evaluation theory
CFA	Confirmatory factor analysis
CoR	Conservation of Resources theory
EFA	Exploratory factor Analysis
FATA	Federally administered tribal areas
IEP	Institute of Economics and Peace
KPK	Khyber Pakhtunkhawa
NATO	North Atlantic Treaty Organisation
NICE	National Institute for Health and Excellence
OST	Organisational support theory
POB	Positive organisational behaviour
POS	Perceived organisational support
Psycap	Psychological capital
PTSD	Post-traumatic stress disorder
SATP	South Asia terrorism portal
Security-POS	Security-perceived organisational support
UN	United Nations

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## **Chapter 1 - Introduction**

I have lived under the threat of terrorism. I have lost loved ones, and seen my friends lose their lives and homes which inclined me towards this research. It took nearly four years to gain the courage and knowledge to choose my topic, and the more I delved into the subject, the more I felt compelled to study it. It was not the happiest topic but one that moved me profoundly, and became a heartfelt drive. I was fortunate to receive a Doctoral scholarship at Massey University which enabled me to study what I felt deeply about and wanted to understand. This study addresses how employees living under on-going terrorism are affected by the stressor in their jobs while being under the burden of the stress of terrorism. It further determines the roles of organisational support and employees' psychological resources in buffering and explaining the detrimental consequences of the stressors. It holds personal meaning above and beyond the theoretical and practical contributions that it makes.

### **1.1. Overview**

This thesis by publication is based on three studies and five research articles, which respond to key research questions. The thesis comprises of nine chapters. This chapter overviews the thesis, it starts with the personal motivation for the PhD. Section 1.1 sets the stage for the ensuing chapters. Next, section 1.2 provides the rationale for the research. The rationale is linked with the context of the study which is 'living under on-going terrorism'; covered in section 1.3. The reality of this context present in Pakistan is highlighted in section 1.4. This rationale underpins the foci of the research questions covered in section 1.5 and the theoretical framework shown in figure 1-1. Next, the considerable need for the research is presented in section 1.6. The chapter concludes in section 1.7 by outlining the layout of the thesis.

This is a thesis by publication, the research articles are stand-alone pieces, which should separately answer some, and collectively answer all of the research questions. In such a thesis, the presentation of the research articles is mandatory, but it also needs to provide an overview, literature review, methodology and discussion of the overall study. The overview of the study is done in

Chapter 1. Next, the literature review, beyond that which is covered in the research articles is presented in Chapter 2, this provides the understanding and overall link to the various theoretical foundations for the study. Similarly, even though each research article provides its own methodology, the thesis document needs to elucidate the methodology and design of the overall research; this is presented in Chapter 3. Chapters 4-8 consist of the research articles. The five research articles; each discuss their own findings and implications. However, the thesis needs an overall discussion and conclusion to attain a comprehensive understanding of the findings and the broader implications of the entire study; this is covered in Chapter 9. Next, I discuss the rationale for this study.

### **1.2. Rationale**

People in organisations are often stressed due to work (Clay, 2011; Harnois & Gabriel, 2000). This is well supported in stable Western country settings. However, what is unknown is how job stress influences an employee who lives in a region or country suffering the effects of terrorism. Further, research has shown that job stress reduces if employees have support from their organisation (Rhoades & Eisenberger, 2002) and/or if employees have the personal psychological resources to deal with stress effectively (Avey, Reichard, Luthans, & Mhatre, 2011). However, how much help do these resources give towards job stressors in the context of living under extreme terrorism is unknown. This PhD study attempts to answer these questions. In order to understand the rationale for this research, I first present the context of terrorism, followed by the extremity of the context in Pakistan.

### **1.3. Context of Terrorism**

Johns (2006) stated that the influence of context is often unrecognized or under-appreciated. This thesis argues that the context of ‘living under terrorism’ is one that deserves greater attention. On-going indiscriminate terrorism, targeting unarmed civilians, is one of the most severe challenges of our times (Canetti-Nisim, Halperin, Sharvit, & Hobfoll, 2009). Terrorism is “warfare on a psychological field of battle” (Butler, Morland, & Leskin, 2007, p. 400). It not only leads to loss of lives and injuries, but causes disproportional reactions such as sense of personal and collective fear (Canetti-Nisim, et. al. 2009), confusion and helplessness against an often faceless

enemy; anxiety and distress of expected and actual losses (Bongar, Brown, Beutler, Breckenridge, & Zimbardo, 2007).

Such incidents can become traumatic events (Bell, 1995) as these are often outside the range of a normal person's experience, and can overwhelm the individual's normal coping capability; and hence cause severe stress reaction. Thus, terrorist attacks can be called "... overwhelming events, survivors of such events are potentially at high risk for Post-Traumatic Stress Disorder (PTSD)" (Bongar et al., 2007, p. 140). Canetti-Nisim et al. (2009) state that it is no surprise that "... people who experience serious loss, disruption, injury, or the death of a loved one following a traumatic event tend to show more severe psychological distress than do those who suffer fewer consequences" (p. 267). Continuous and/or frequent exposures to terrorism can lead to higher chances of PTSD (Karam et al., 2014). Next I present the reality of the context of terrorism and possibility of PTSD in relation to Pakistan.

#### **1.4. Pakistan and the context of terrorism**

Pakistan is a country which is considered to be hosting terrorism, while she suffers from it herself. For a decade, every year the number of deaths due to planned violence, suicide bombing, open firing and drone attacks is estimated at between 1,000-3,000 (South Asia Terrorism Portal, 2016) with an average death toll of 2,000 every year (United Nations, 2012). As per the Global Terrorism Index (Institute of Economics and Peace, 2014, 2015), Pakistan is one of the five worst terrorism-affected countries, making it one of the least peaceful places on Earth.

The effects of terrorism are now presented with a few chronological highlights. A United Nations (2012) report stated that Pakistan has suffered:

"heavy cost of the struggle against extremism and terrorism. Loss of life alone is estimated at 35,000 civilians and 3,500 security personnel. In addition, direct and indirect costs rose from \$2.669 billion in 2001/2 to \$13.6 billion in 2009/10, with projections for 2010/11 being as high as \$17.8 billion" (p. 2).

In 2013, more than 80% of the lives lost to terrorism occurred in only five countries: Iraq, Afghanistan, Pakistan, Nigeria and Syria (Institute of Economics and Peace, 2013, p. 4). The annual death count due to terrorist attacks in Pakistan rose from 164 in 2003 to 3,318 in 2009 and totalled

more than 20,000 casualties as of 2015. In 2015, 72% deaths (due to terrorism) were in the five worst terrorism-affected countries, with Pakistan being one of them (Institute of Economics and Peace, 2014). In 2017 (until June 26th), the death toll was already 308 (Aljazeera, 2017; South Asia Terrorism Portal, 2017).

All sectors and professions have been widely affected by acts and threats of terrorism in Pakistan, especially in the locations of Khyber Pakhtunkhwa (KPK) and the Federally Administered Tribal Areas (FATA) (South Asia Terrorism Portal, 2016), in the worst hit region/province in the country. The following example highlights the reality of the lives of those living under terrorism. December 16th, 2014 in a single terrorism incident in a school in Peshawar 132 school children lost their lives along with their principal and other school staff leading to a total death toll of 141 (Gambino & Jalabi, 2014). Thus, Pakistan provides the context where a large number of people are going about their everyday work life with the stress of trauma due to terrorism.

As stated above, a large part of the population in Pakistan lives with on-going exposure to threats of terrorism, it is likely that people are exposed to incidents of terrorism, with the loss of family, friends and property. Living under on-going terrorism where their own or loved ones' lives are in danger; such situations make people feel helpless and fearful. Such feeling and constant loss of lives makes PTSD a probable outcome for many (Hussain, 2015). Now I will briefly discuss the research questions.

### **1.5. Research Questions**

Rarely have researchers focused on regions like Pakistan, a country small in size yet having 182 million people (more than half the population of United States and 22 times greater than Israel), to study on-going terrorism in relation to workplaces. I compare Pakistan to these two countries because most of the PTSD research has focused on these two countries; I discuss this in more detail in the literature chapter. Clearly, there are gaps in the literature where Pakistan as a country provides a natural setting to inquire as to how living in extreme stressful conditions such as on-going terrorism influences employees. Its examination can enable us to comprehend the job and traumatic stressors interplay and their influence on employee outcomes in the respective context. However, understanding the stressors in the context was only the half the story for me. I also wanted to

incorporate sources that might help reduce/explain the detrimental consequences of stressors. For this, I considered personal and organisational resources. The next chapter provides a detailed review of these resources, how these might help employees, and gaps in extant knowledge. Below, I briefly outline their nature and relevance to the study.

Psychological capital (PsyCap) is a personal resource that helps deal with stress. It is composed of four factors: optimism, hope, self-efficacy and resilience (Avey, Reichard, et al., 2011; Luthans, Youssef-Morgan, & Avolio, 2015; Youssef & Luthans, 2007). “Employees who have high PsyCap may be more likely to “weather the storm” of the type of dynamic, global environmental contexts confronting most organisations today better than their counterparts with lower PsyCap” (Luthans, Avolio, Avey, & Norman, 2007, p. 568). This can be useful for employees living under on-going terrorism. However, PsyCap has not been widely studied in conjunction with PTSD in the context of terrorism (Junaid & Haar, 2015).

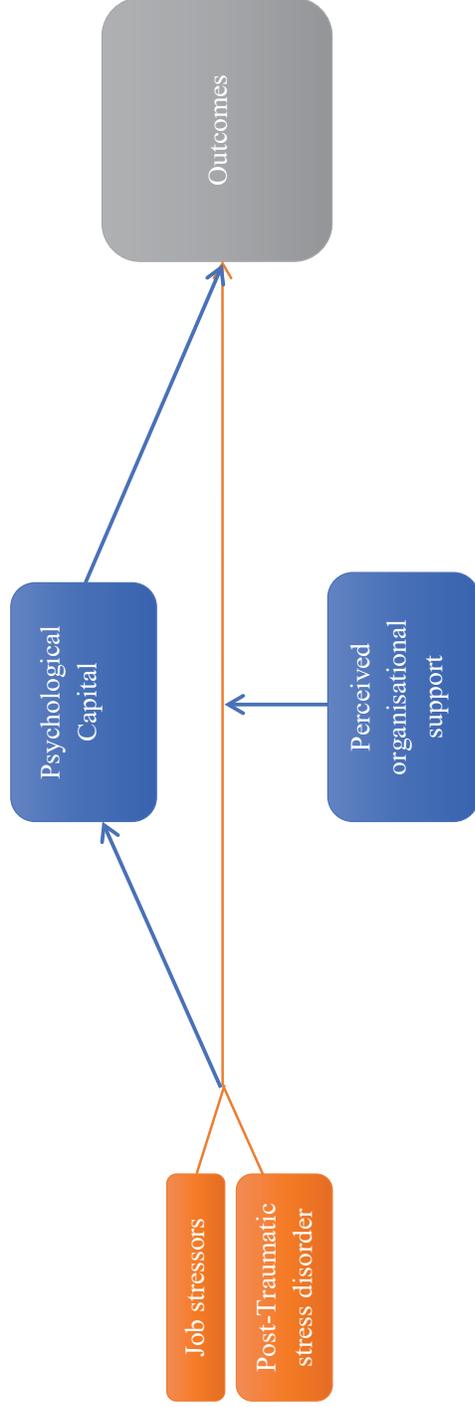
Like personal resources, organisational support works as a resource that can decrease job stress (Rhoades & Eisenberger, 2002). Perceived Organisational Support (POS) is “the degree to which employees believe that their organisation values their contributions, cares about their well-being and fulfils socio-emotional needs” (Eisenberger, Huntington, Hutchison, & Sowa, 1986, p. 501). This could be useful for employees living under on-going terrorism. Again, there is limited research in the context of on-going terrorism beyond employees living in Israel and expatriates on assignments in terrorism-afflicted areas (Bader, Reade, & Froese, 2016; Bader & Berg, 2013, 2014; Bader, Berg, & Holtbrügge, 2015; Bader, Schuster, & Dickmann, 2015).

Thus, this research aims to build understanding around four research questions. These are given below, followed by the theoretical framework (figure 1-1):

- *What influence does the terrorism context (around PTSD) have on Pakistani workplaces and their employees?; and*
- *What influence do stressors (job stressors and PTSD) have on Pakistani employee outcomes? Is one stressor most dominant? Do job stressors and terrorism stressors (PTSD) interact and have a more detrimental influence on outcomes?*

- *What is the nature and role of support for employees working while living under terrorism? Are perceptions of support beneficial? Are there any specific nuances? Does support buffer the influence of stressors on outcomes?*
- *What role do individual psychological resources play in reducing the detrimental effects of job stressors and PTSD? Are they helpful in dealing with job stressors and PTSD?*

**Figure 1-1: Theoretical framework**



## **1.6. Need for the research**

Terrorism as a stressor is not widely studied in organisational studies literature (Byron & Peterson, 2002; Howie, 2007) and its work-related outcomes have not received ample attention (Biggs, Brough, & Barbour, 2014). With growing threats/acts of terrorism, it is likely that it may affect employees, but the nature of those effects are largely unknown (Toker, Laurence, & Fried, 2015). There have been growing number of calls to research the context of terrorism (James, 2011a), for instance, a special issue of *International Journal of Human Resource Management* asked scholars to research the *Danger and risk as challenges for HRM: How to manage people in hostile environments* (Bader, et al., 2015), and the British Academy of Management's (2016) annual conference theme was also related to working in hostile environments. An *Academy of Management Journal* special research forum called scholars to do more research in eastern/non-western contexts for more contextually-relevant research (Barkema, Chen, George, Luo, & Tsui, 2015). In the wake of the current events, it is thus pivotal to focus on research in this area.

In years to come, terrorism and PTSD are likely to have wider implications not only for individuals but organisations and the wider international community (Counter-Terrorism Committee Executive Directorate, 2013). For instance, employees under extreme stress may be dissatisfied with their job and exhibit low productivity. Overwhelmed by stress, an employee may show aggression and deviant behaviours; these in turn become costly for the organisation. Looking beyond organisational implications, a large number of people have fled or are fleeing from such hostile environments; those immigrants bear the burden of the stress, which comes with them to the host organisations and countries. It is timely and vigilant to focus on and address these issues in management and organisational studies.

## **1.7. Thesis Outline**

This chapter provided the motivation, rationale, and context of the study; and explained the need for research. It then covered the research questions and stated the need for the research. In this section I provide the thesis outline. Developing the thesis by publication requires the synthesis of stand-alone pieces and their findings, which is a science and an art in itself. Conciseness in terms of the word counts and the precision in sentences is science-like; it is the art

side which helps integrate all of the parts, almost like making a mosaic or managing an orchestra. I found this challenging, but once done, really fruitful because it teaches both the art and science of research. Below is the layout of the thesis (table 1-1).

**Table 1-1: Chapter numbers, titles and overview**

<b>Chapter No. &amp; Title</b>	<b>Overview</b>
<b>1 - Introduction to the thesis</b>	<ul style="list-style-type: none"> <li>• Provides thesis overview</li> <li>• States Problem statement</li> <li>• Explains context of the study</li> <li>• Gives thesis layout</li> </ul>
<b>2 - Literature Review</b>	<ul style="list-style-type: none"> <li>• Covers pertinent theories</li> <li>• Identifies gaps in the literature</li> <li>• Develops and states research questions</li> </ul>
<b>3 - Methodology and design</b>	<ul style="list-style-type: none"> <li>• Provides research paradigm</li> <li>• Design of each study along with the justifications</li> <li>• Covers methods and tools used</li> </ul>
<b>4 – Journal Article - Employees Living Under Terrorism: Does Positive Organisational Behaviour Provide a Lens for Help (and Hope)?</b>	<ul style="list-style-type: none"> <li>• Provides theoretical foundations for the research questions, around the role of employees’ psychological resources in the context of the study</li> <li>• Discusses broad implications for theory and practice</li> <li>• Provides future implications</li> </ul>

<p><b>5 - Journal Article - Working in a Terrorist Region: HR Manager Perceptions</b></p>	<ul style="list-style-type: none"> <li>• Based on a Qualitative inquiry explores stress of job and terrorism, and</li> <li>• Discusses its influence on employee behaviours</li> <li>• Provides future implications</li> </ul>
<p><b>6 - Journal Article - Security-Related Perceived Organisational Support: An Exploration from Terrorism affected Workplaces</b></p>	<ul style="list-style-type: none"> <li>• Based on qualitative explores nature of organisational support in the context of the study</li> <li>• Uses findings, and tests through quantitative inquiry</li> <li>• Confirms exploratory study</li> <li>• Provides future implications</li> </ul>
<p><b>7 - Journal Article - Job Stress and Post Traumatic Stress Disorder on Job Outcomes: The Mediating Effects of Psychological Capital</b></p>	<ul style="list-style-type: none"> <li>• Based on quantitative inquiry, tests the relationships regarding the job stress and PTSD</li> <li>• Covers job stress and PTSD influence on employee turnover and satisfaction</li> <li>• Further highlights role of psychological resources in reducing the detrimental effects of the stressors</li> <li>• Provides future implications</li> </ul>
<p><b>8 - Journal Article - Challenge-Hindrance stressors and its effect on job burnt in the</b></p>	<ul style="list-style-type: none"> <li>• Based on quantitative inquiry tests the relationship of job stress and PTSD with exhaustion and cynicism</li> </ul>

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**employees living under on-going terrorism: the**

- Highlights the potential role of organisational support in reducing the negative effects of the stressors and its influence on employee

**moderating role of organisational support**

- Provides future implications

**9 - Discussion and Conclusion**

- Discusses, with the focus to integrate the studies' findings presented in different papers

- Presents the contributions and implications for theory and practice

**References**

- Covers references of chapters 1- 3, and 9

- The references of each paper (Chapters 4-8) are provided at the end of each respective paper

**Supplementary documents**

- All data collection tools, ethics-related documents
-

## **Chapter 2 – Literature Review**

### **2.1 Introduction**

This chapter presents the literature review, covering the theories and frameworks that have been used to develop the theoretical foundations and research questions for this study. The review starts with a brief overview and then presents conservation of resources theory as an explanatory framework in section 2.2, to expound the various arguments. Next, section 2.3 covers the literature on job stress, and section 2.4 presents the stress of terrorism as an extra-organisational stressor. It then looks at the possible influences of job and terrorism stressors on employee behaviours/outcomes in section 2.5. Further, section 2.6 and 2.7 present concepts of organisational support and psychological capital, and develop literature-informed arguments to highlight that organisational support and psychological capital can conserve resources and thus reduce the adverse consequences of stressors on outcomes. Section 2.8 builds on the literature and points to the gaps in the literature leading to the key research questions. Section 2.9 serves the purpose of concluding the chapter with the summary, and outlines the literature that is covered in each research article, which is presented in table 2-2.

### **2.2 Conservation of Resources and terrorism**

Since the research is based on the context of terrorism, it is vital to define terrorism and how it affects people. From there, we can establish how being a factor that is exogenous to the organisation may influence workplace and employees. According to the Oxford Dictionary (2017), terrorism is defined as “(t)he unlawful use of violence and intimidation, especially against civilians, in the pursuit of political aims.” It causes terror which means “extreme fear”. Williams (2004, p. 4) defined terrorism as “politically [including ideologically, religiously or socially – but not criminally] motivated violence, directed generally against non-combatants, intended to shock and terrify, to achieve a strategic outcome.” Putting these meanings into the context of this study, if people are living under constant on-going terrorism, they are likely to feel extreme fear because of the unlawful use of violence and intimidation used against them. This can take a physical and psychological toll on people, which can be understood through the conservation of resources theory (Hall, Murray, Galea, Canetti, & Hobfoll, 2015; Hobfoll, 1989).

Conservation of resources (CoR) is used as the main overarching theory to explain the theoretical basis for the research. CoR is incorporated as such because it helps explain the relationships of job stress and stress of terrorism on people and enables understanding of how the stressors operate and influence employee behaviours. According to CoR, people have limited physical and psychological resources, and stressors take a toll and deplete the limited resources (Hobfoll, 1989). Living under constant fear of terrorism can take a toll on people (Toker et al., 2015), causing them to feel stressed under such circumstances (Hobfoll et al., 2008). Coupled with the constant exposure, it is likely that there is actual loss of life and property which further increases the stress of the trauma (Hobfoll et al., 2008). This stress is not only felt in personal life but is carried forward to the workplace as people living under such circumstances still have to work and make ends meet. The role and importance of CoR theory in understanding the stress experienced and its implications for employee outcomes are discussed in the five publication articles presented in Chapters 4-8.

CoR has been widely used in the context of terrorism, stressors, and social support. Thus, it was theory that enabled me to explain my framework and findings, better than any other theory could do in my opinion. I briefly discuss this under the 'theories of job stress' in section 2.2.1. My argument is that living under ongoing terrorism will tax employees' resources, as such leaving with fewer material and immaterial resources to deal with the situation. The ongoing nature of terrorism may also leave them with little resources gain, and even lesser resources to conserve. This will cause employees to feel stressed because of terrorism, and being left with taxed emotional and psychological resources, employees will have fewer resources to deal with job stressors.

On the other hand, using the same theory, I argue that organisation can provide support, with perceived organisational support employees are likely to feel cared for, and thus that may be a source of resource gain. CoR has provided evidence that social support in cases of terrorism can help people deal with stressors better. The same reasoning is applied in this case, that if employees get organisational support it will help them feel resourceful, resulting in buffering the adverse effects of stressors.

CoR was a useful lens to understand and develop the theoretical foundation for the resource depletion hypothesis. I used this concept to explain the relationship of PTSD in ongoing terrorism and PsyCap. Resource depletion posits that if a person is in a constantly taxing situation, it will reduce the resource pool and deplete the resource pool. I argue that ongoing terrorism can do very similar. It can take a toll on one's psychological capital. The ongoing nature of terrorism may make one lose hope. Constant fear and anxiety may reduce resilience. Even the optimistic may start feeling that it is beyond reach and control. The lack of control may reduce self-efficacy. All these factors can reduce the psychological capital.

Next, I present table 2-1 which outlines the above arguments covered in the literature review sections in the papers presented in chapter 4-8. The table is followed by the literature review of the study variables.

**Table 2-1: Theories and variables covered in each Chapter/ Paper**

Chapter No	Manuscript/Paper title	Theory and variables
4	Job Stressed Employees Living Under Terrorism: Does Positive Organisational Behaviour Provide a Lens for Help (and Hope)?	<ul style="list-style-type: none"> <li>• Positive organisational behaviour</li> <li>• Demand resource model</li> <li>• Post-traumatic stress disorder</li> <li>• Psychological capital</li> <li>• Organisational citizenship behaviours</li> <li>• Deviant workplace behaviours</li> </ul>
5	Working in a Terrorist Region: HR Manager Perceptions	<ul style="list-style-type: none"> <li>• Conservation of resources theory</li> <li>• stressors</li> <li>• extra-organisational stressors</li> <li>• Post-traumatic stress disorder</li> </ul>
6	Security-Related Perceived Organisational Support: An Exploration from Pakistani Workplaces	<ul style="list-style-type: none"> <li>• Organisational support theory</li> <li>• Perceived organisational support</li> <li>• Terrorism context</li> </ul>
7	Job Stress and Post Traumatic Stress Disorder on Job Outcomes: The Mediating Effects of Psychological Capital	<ul style="list-style-type: none"> <li>• Conservation of resources theory</li> <li>• Positive organisational behaviour</li> <li>• Challenge-hindrance stressors framework</li> <li>• Post-traumatic stress disorder</li> <li>• Psychological capital</li> <li>• Job satisfaction</li> <li>• Turnover intentions</li> </ul>
8	Challenge-Hindrance stressors and its effect on job burnt in the employees living under on-going terrorism: the moderating role of organisational support	<ul style="list-style-type: none"> <li>• Conservation of resources theory</li> <li>• Organisational support theory</li> <li>• Perceived organisational support</li> <li>• Challenge-hindrance stressors framework</li> <li>• Post-traumatic stress disorder</li> <li>• Employee burnout</li> </ul>

## 2.3 Stress

The World Health Organisation considers occupational stress an epidemic (Avey, Luthans, & Jensen, 2009). Stress can lead to a variety of psychological and physiological problems among employees (Zhong et al., 2009). The importance of stress is uncontested; however, the definition of 'stress' has always been a problem. Stress is the response of an individual when she or he perceives her or his capabilities to be insufficient to deal with external demands (Lazarus, 1966). A stressor is an agent that produces stress at any time (Selye, 1976).

Stress has been defined from various perspectives that mainly boil down to three streams: individual, organisational and integrated (Parker & DeCotiis, 1983). The individual approach focuses on personality, age and heredity factors, whereas organisational factors consider factors such as the nature of supervision, work and job demands. The integrated approach incorporates both the individual and organisational approaches. Lazarus and colleagues favour the view that stress is the integration between external environmental demand and an internal state of perceived ability to meet demands or alter them (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986; Lazarus, 1966; Lazarus & Folkman, 1984).

### 2.2.1. *Theories of job stress*

Lazarus (1991) presented the stress-coping mechanism. He explained that our appraisal in case of stress determines our emotions and response. For example, the cognitive –motivational relational theory of emotions explains that once something stressful happens we appraise the situation. If it has an appraisal that is against our ego identities, then it leads to negative emotion and coping. The coping also depends on the psychological resources of the one suffering. This however does not explain, that if the suffering goes on for prolonged periods of times, then what are the implications for emotions and coping?

Another useful and popular model of job stress is the Job demands Control Model (Karasek, 1979), which explains that when demands exceed and there is little decision latitude and the demands can cause stress, because one feels that the situation is out of control. The model further posits that control helps in coping, the more the control the more the likelihood of coping. But when employees get tasks which are repetitive, they have no decision latitude and are required

to o the jobs with having no other choice, then it is low control situation. However, it does not highlight that in context where the stress is ongoing and uncontrollable how would it impact employees, and also does not theoretically support the idea that one then tries to conserve resources by focusing on what can be controlled (job stressors) rather than what cannot be controlled (terrorism).

Bakker and Demerouti (2007) developed the idea of demands causing stress a step further with their demand-resource framework. It highlights two kinds of demands related to work, namely, time and strain demands. The time demands are pressure due to long hours and overtime whereas strain demands are pressure due to work overload and complex tasks (Bakker & Demerouti, 2007, 2016). Since organisations are becoming increasingly competitive, demand-resource balance is becoming ever more difficult to attain (Agypt & Rubin, 2012). A substantial amount of research elicits that job stressors such as role ambiguity, role conflict and time pressures influence stress levels experienced by employees (Sikora, Beaty, & Forward, 2004).

Notwithstanding this, not all stress is negative. The transactional theory of stress (Lazarus & Folkman, 1984) is based on cognitive appraisal where a person evaluates the person-environment transaction to determine if the situation leaves the person better or worse off. This happens at two levels; first, it is determined whether the person has anything at stake in the situation at hand; if so, then second is the evaluation of how the harm can be reduced or the benefit increased. These evaluations determine whether a situation is harmful/threatening or challenging/beneficial. Therefore, if the stressor is considered challenging, it will potentially provide the opportunity to gain resources, whereas if it is threatening, it is likely to deplete resources (Kahn, 1990; Lazarus & Folkman, 1984). This led to the development of challenge-hindrane framework of stress, which is reviewed next.

### ***2.2.2. Challenge and hindrance stress framework***

The challenge and hindrance stress framework conceptualizes challenge and hindrance stressors as two distinct constructs (Cavanaugh, Boswell, Roehling, & Boudreau, 2000; Lepine, Podsakoff, & Lepine, 2005). According to Boswell, Olson-Buchanan, and LePine (2004), challenge stressors stand for “work-related demands or circumstances that, although potentially

stressful, have associated potential gains for individuals” (p.166) whereas hindrance stressors refer to “work-related demands or circumstances that tend to constrain or interfere with an individual’s work achievement” (p. 166).

Challenge stressors are appraised as challenging and manageable, and so may be viewed as opportunities for personal growth; these may be stressful but can be overcome by extra effort. Hindrance stressors are appraised as threatening and unmanageable, and so may be viewed as obstacles to personal growth (Cavanaugh et al., 2000). They could be situational constraints, and may include elements such as hassles, role ambiguity, overload and conflict, interpersonal conflict, supervisor-related stress and ‘red tape’. Challenge and hindrance both are stressors, but they can lead to different outcomes. Hindrance stressors as such would be predicted to have negative affective and behavioural outcomes, as they are unlikely to be overcome by the employee, even with extra effort (Clarke, 2012). The challenge and hindrance framework, and its consequences, are further discussed in Chapters 7 and 8.

Stress may be caused by organisational stressors, or extra-organisational stressors, such as factors outside workplace that cause stress in people (Hobfoll, 1989; Lazarus & Folkman, 1984). Most of the research work on stress and related organisational outcomes has concentrated only on organisational factors leading to stress, whereas extra-organisational factors that lead to perceived stress have been largely ignored. Extra-organisational factors of stress could be many; one such important factor is environmental threats and traumatic events. The literature on stress, in management or other disciplines, suggests that the severe or acute extra-organisational stressors like traumatic events can result in costly negative repercussions for the organisation (Byron & Peterson, 2002). Next, I discuss stress of terrorism, as an extra organisational stressor.

#### **2.4 Stress of terrorism**

Terrorism has proliferated across the globe (Lister, 2015; Schippa, 2016). This is evident in recent decades and, more recently, in widespread incidents of terrorism in last three years. To name but a few, countries affected by terrorism include France (Hirsch et al., 2015), England (BBC, 2017), America (DiGrande, Neria, Brackbill, Pulliam, & Galea, 2011), and more devastatingly Syria, Afghanistan and Pakistan (Institute of Economics and Peace, 2014, 2015).

An event such as a terrorist attack which is outside the range of a person's normal experience and is powerful enough to overwhelm his or her normal coping capability is called a traumatic event (National Institute for Health and Clinical Excellence, 2005). It can cause a severe stress reaction (Bell, 1995). Such stressful or traumatic events can become acute-extra-organisational stressors (Beehr, Jex, Stacy, & Murray, 2000). This is covered in more detail next.

#### ***2.4.1. Terrorism- Trauma and PTSD***

Traumatic stress has been found to be caused by three kinds of catastrophic events: natural catastrophes such as tornadoes and earthquakes; accidental catastrophes such as aeroplanes malfunctioning or deaths or losses due to vehicles; and human-induced catastrophes such as war, robbery, hijackings and murder. Individuals are at risk of developing traumatic stress reactions if exposed to natural or man-made catastrophic events (Bell, 1995). Traumatic stress reactions can be cognitive; physiological; and behavioral (e.g. problems with concentration and upsetting dreams, sleeping disorders, withdrawal from social interaction - (van der Kolk, 1988).

Prolonged and repetitive exposure to traumatic events could increase the likelihood of PTSD. It develops following a stressful event or situation of an exceptionally threatening or catastrophic nature which is likely to cause pervasive distress in almost anyone (American Psychiatric Association, 2013). PTSD does not therefore develop following those upsetting situations described as 'traumatic' in everyday language (e.g. divorce, loss of job, failing an exam). PTSD is a disorder that can affect people of all ages. Around 25–30% of people experiencing a traumatic event may go on to develop PTSD. The likelihood of developing PTSD is higher in women than in men (American Psychiatric Association, 2013).

The most characteristic symptoms of PTSD are re-experiencing symptoms. PTSD sufferers involuntarily re-experience aspects of the traumatic event in a very vivid and distressing way. This includes flashbacks where the person acts or feels as if the event was recurring; nightmares; and repetitive and distressing intrusive images or other sensory impressions from the event. Reminders of the traumatic event arouse intense distress and/or physiological reactions. Avoidance of reminders of the trauma is another core symptom of PTSD. This includes people, situations or circumstances resembling or associated with the event. People with PTSD often try

to push memories of the event out of their mind and avoid thinking or talking about it in detail, particularly about its worst moments. On the other hand, others ruminate excessively about questions that prevent them from coming to terms with the event (e.g. about why the event happened to them, about how it could have been prevented, about how they could take revenge).

PTSD sufferers also experience symptoms of hyper-arousal including hypervigilance for threat, exaggerated startled responses, irritability, difficulty concentrating, and sleep problems. Others with PTSD also describe symptoms of emotional numbing. These include lack of ability to experience feelings, feeling detached from other people, giving up previously significant activities, and amnesia for significant parts of the event (National Institute for Health and Excellence, 2005).

There are various streams in which PTSD is studied, including: social support in general (Clapp & Gayle Beck, 2009); PTSD development in cumulative war trauma (Johnson & Thompson, 2008); in case of war veterans; with respect to risk factors (Brewin, Andrews, & Valentine, 2000); treatments in general (Ruzek & Rosen, 2009); in children (Dyregrov & Yule, 2006); and in changes in the religious beliefs (Falsetti, Resick, & Davis, 2003). Others look at belief in a just world as a buffer for PTSD development (Joseph, Williams, & Yule, 1993) and it failing to be a buffer for PTSD (Otto, Boos, Dalbert, Schöps, & Hoyer, 2006); in cases of natural disasters.

Chapters 7 and 8 discuss PTSD as a probable outcome of terrorism; next they highlight the limitation of the PTSD-terrorism literature in management science being only in three main streams. The three streams are in case of one-time incidents, Israel's exposure to terrorism, and in relation to stress caused to expatriates' living in terrorism-endangered countries. Thus, these two chapters also detail that terrorism and PTSD in the context of living under on-going terrorism have not been studied. Further, they deduce that, in any case, PTSD has not been widely addressed with respect to employee-related outcomes. Next, I briefly review job stress- PTSD and employee outcomes.

## 2.5 Job Stress, PTSD and outcomes

Stress is known to contribute to organisational problems such as employee dissatisfaction, alienation, low productivity, deviance work place behaviours (Fox, Spector, & Miles, 2001), and employee turnover (Avey et al., 2009; Podsakoff, LePine, & LePine, 2007). Such consequences heavily cost the organisation (Beehr et al., 2000; Beehr & Newman, 1978; Parker & DeCotiis, 1983). Not all stress is dysfunctional but high levels of stress where demands exceed resources can become dysfunctional with negative consequences (Hobfoll, 1989).

There is ample literature on job stress and its influences on employee outcomes but scant literature on PTSD and employee outcomes (covered in chapters 4, 7 and 8). PTSD caused by experiencing an extreme level of stress is thus likely to have similar but probably more intense consequences as dysfunctional stress (National Institute for Health and Excellence, 2005). There is evidence that PTSD can lead to detrimental outcomes, but these are typically not found amongst conventional organisational settings (McFarlane, Williamson, & Barton, 2009).

Johns (2006) is of the view that contextual variables are essential in determining employees' attitudes and outcomes. Unfortunately, an undeniably prominent contextual variable is exposure to terrorism, which affects all who are exposed to it (Creamer & Liddle, 2005; Pines & Keinan, 2007). Therefore, it can adversely affect employees and their respective organisations (Byron & Peterson, 2002). PTSD can lead to tardiness, errors of judgment and irresponsibility (Cooper, Kirkcaldy, & Brown, 1994).

The literature on stress of the job and terrorism is equivocal, and often associated with one-time incidents (this is further discussed in Chapters 7 and 8). Collectively and contextually, it is hard to determine how job stress and PTSD can influence employee behaviours. Thus, the existing literature can only suggest at possible relationships. Given the above-mentioned gaps in the existing body of literature, the first two research questions of the study related to PTSD and job stressors are stated below (the next two questions are provided in sections 2.6 and 2.7).

### **Research Questions:**

1. *What influence does the terrorism context (around PTSD) have on Pakistani workplaces and their employees? and*

2. *What influence do stressors (job stressors and PTSD) have on Pakistani employee outcomes? Is one stressor most dominant? Do job stressors and terrorism stressors (PTSD) interact and have a more detrimental influence on outcomes?*

The two-dimensional work stressor framework has emerged as “an important and popular theoretical lens” (Zhang, LePine, Buckman, & Wei, 2014, p. 375). It is a robust framework with which to study the relationship between work stressors and work-related outcomes (Yao, Jamal, & Demerouti, 2015). It is useful for my study because it provides depth and choice of understanding stressors which may have positive consequences, rather than only looking at the negative side of stress. Challenge stressors are likely to increase, whereas hindrance stressors are likely to decrease, positive employee outcomes. For instance, challenge stressors are likely to increase job satisfaction, performance and prosocial behaviours; and decrease turnover intentions and absence. Hindrance stressors are likely to have the opposite effect. As stated earlier, this is covered in more detail in Chapters 7 and 8. Next I present the literature review of employee outcomes.

The literature review of outcomes covers performance, job satisfaction, voluntary behaviours, turnover intentions, absence and burnout. The reason for reviewing only the above mentioned outcomes is explained in Chapter 3 which covers methodology, where it explains that at the start of the research the outcomes of stressors (job and terrorism) were not known. For this purpose the (first) a qualitative study was conducted, which pointed out the most salient outcomes, and then these outcomes were studied quantitatively. Thus only those outcomes which surfaced in the first study were incorporated in the research papers and are reviewed below. Although each (paper) chapter provides its own literature review, below I provide literature review of these variables to provide continuity and cover the areas that could not be covered due to word limits in the respective papers.

### **2.5.1. Job performance**

Employee performance influences organisational success. Employee performance relates to attaining job and organisational objectives, leading an organisation towards its aims. Pindek,

Kessler, and Spector (2017) in their review, highlight that stress taken as single source may be too parsimonious an approach to determine its effects on performance. This is supported by meta-analysis (Crawford, LePine, & Rich, 2010) which shows that it should be divided in two factors (i.e. challenge and hindrance) in order to determine its effects on performance. Lepine et al. (2005) found that challenge stressors positively and hindrance stressors negatively affect performance; Pearsall, Ellis, and Stein (2009) found a similar relationship between stressors and performance in teams.

Laposa, Alden, and Fullerton (2003), in a study of Emergency Department workers, found that 27% of workers' job performance was affected by PTSD, which interfered with performing duties effectively. There has been a significant amount of research on armed forces, jobs-related to law enforcement and emergency response; where the consequences of PTSD include reduced levels performance (Benedek, Fullerton, & Ursano, 2007; Neria, Galea, & Norris, 2009). However, the general public who are employed in different occupations and live under ongoing terrorism are not well researched with respect to PTSD. This is covered in Chapter 4, 5, 7 and 8 in more detail.

### **2.5.2. Job satisfaction**

According to Locke (1976), job satisfaction is “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (p. 1,304). Research supports that the nature of the job (the intrinsic part of the job) is the strongest predictor of job satisfaction (Hackman & Oldham, 1980) and retention (Saari & Judge, 2004). Job satisfaction has been studied with many antecedents and correlates such as personality (Judge, Bono, Erez, & Locke, 2005; Judge, Thoresen, Bono, & Patton, 2001), job stress (Jamal, 1990), workplace stress (Fairbrother & Warn, 2003), work role (Nelson & Burke, 2000), role ambiguity and conflict (Tubre & Collins, 2000), work overload (DeFrank & Ivancevich, 1998), and absence (Mathieu & Kohler, 1990), to state a few. Among these, job stress is important (Abbas & Raja, 2015). There are many work-related factors that cause stress which in turn affects job dissatisfaction (Fairbrother & Warn, 2003; Landsbergis, 1988).

Chapter 7 provides a review of the relationship of challenge stress having a positive, whilst hindrance stressors having a negative, relationship with job satisfaction. The results of the limited literature which has looked at PTSD and job satisfaction are unequivocal. North et al. (2002) found that high PTSD and job satisfaction had an inverse association with job satisfaction. Nandi et al. (2004) found that, in a post 9/11 NYC sample, PTSD was associated with high rather than low job satisfaction, possibly because of the rampant job losses - having a job made it worthwhile. As such, there appears a need to explore these relationships further to provide greater understanding. The specific hypothesis around job satisfaction and stressors are presented in Chapter 7.

### **2.5.3. Burnout**

Maslach and Jackson (1981) indicated that individuals working in 'people jobs' are likely to suffer from burnout with emotional exhaustion, cynicism and inefficacy. Over the years, the first two factors have surfaced to be more important and more researched as compared to the third factor, which is often considered to be more of a consequence of the first two (e.g. see Demerouti, Bakkar, Vardakou and Kantas, 2003 and meta-analysis by Alarcon, 2011). Prolonged exposure to specific working conditions or stressors can lead to burnout; the two main factors of burnout are emotional exhaustion and cynicism/disengagement (Bakker, Demerouti, & Verbeke, 2004). Emotional exhaustion is an extreme form of fatigue which happens when one is under intense physical, emotional or cognitive strain caused by persistent exposure to stressors. Cynicism or disengagement is an emotional, cognitive or behavioural rejection of the job; as a result, one distances oneself from one's work, and becomes cynical about it (Demerouti et al., 2003).

Burnout happens when one feels stressed being under high demand situations which cause resource loss. Alarcon (2011) explains this through the primacy of resource loss hypothesis. According to this, when one is under high demand situations, the increasing demands lead to a depletion of resources, with one not having a chance to regain them. Thus, the context of high demands and the prolonged experience of low resources can erode energy, leading to burnout. This concurs with the CoR theory, which further explains that emotional exhaustion disables

effective coping, and thus leads one to become cynical (Hobfoll, Freedy, Lane, & Geller, 1990). Likewise, if there is a high demand and high resources situation, it reduces the chances of burnout.

Emotional exhaustion and cynicism have shown robust relationships with stressors (Demerouti, Bakker, Nachreiner, & Schaufeli, 2000). Crawford et al. (2010), in their meta-analysis, found that both hindrance and challenge stressors lead to burnout. However, Yao et al. (2015) found that both hindrance and challenge stressors relate positively with exhaustion whereas hindrance relates positively and challenge relates negatively with cynicism.

Burnout has been studied over the years in different organisations. Recently, it has also been studied amongst those exposed to secondary trauma (Cieslak et al., 2014), such as fire fighters, counsellors, nurses and health care providers (Mealer, Burnham, Goode, Rothbaum, & Moss, 2009; Mealer, Shelton, Berg, Rothbaum, & Moss, 2007; Mitani, Fujita, Nakata, & Shirakawa, 2006). But beyond the professions, where PTSD and burnout can occur as a part of their jobs (e.g. being exposed to mutilated bodies, which happens as a part of the job of soldiers, health care professionals, or hearing traumatic stories as a part of counselling job), and Israeli population (Pines & Keinan, 2007), PTSD is not widely studied in management science literature. There lies a gap in research where civilians living under on-going terrorism may be suffering from PTSD and as employees are dealing job stress which in turn might lead to burnout. However, there is not much known about such contexts and burnout of employees this is covered in more detail in Chapter 8.

#### **2.5.4. Voluntary behaviours**

When employees are exposed to stress, their voluntary reaction to it may be positive and productive or negative and counterproductive (Spector & Fox, 2002). From this perspective, a challenge may invoke positive and hindrance may invoke negative behaviour. In the following paragraphs, both these voluntary behaviours are introduced and then their relationship with stress and PTSD is discussed in the light of existing literature.

There has been growing concern globally in organisations about the management of deviant workplace behaviour because of its adverse and far-reaching consequences at both individual and organisational levels (Appelbaum, Iaconi, & Matousek, 2007). For years,

researchers have defined these behaviours in different ways. The prominent types of such undesirable behaviours which are related to work place are i) deviant workplace behaviour: “Voluntary behaviour of organizational members that violates significant organizational norms and in so doing threatens the well-being of an organization, its members or both” (Robinson & Bennett, 1995, p. 556); ii) counter-productive work behaviour: “any intentional behaviour on the part of an organization member viewed by the organization as contrary to its legitimate interests” (Sackett, 2002, p. 5); iii) anti-social behaviour: actions that bring harm, or are intended to bring harm, to organisations or those related to the organisations (Giacalone & Greenberg, 1997); iv) and organisational misbehaviour: those acts that violate core organisational and/or societal norms; intentional workplace acts that violate rules pertaining to such behaviours (Vardi & Wiener, 1996).

Robinson and Bennett (1995) have combined different possible deviant behaviours in order to come up with a typology of deviant workplace behaviour. The typology classifies deviant behaviour towards the organisation and interpersonal behaviours into minor versus serious dimensions. It also divides deviance into four categories: production deviance, personal aggression, political deviance and property deviance.

Deviant behaviour is often a stress response (Bennett, Lowe, Matthews, Dourali, & Tattersall, 2001; Penney & Spector, 2005). Job stressors that are perceived to be a threat to well-being can result in inducing negative emotions like anger or anxiety (Fox et al., 2001; Rodell & Judge, 2009) which are likely to invoke deviant behaviours. A stressful employee becomes very rigid in his or her perceptions and views, and becomes less adaptable to the organisational environment which gives an individual a hostile feeling (Wilke, Gmelch, & Lovrich, 1985).

Using CoR theory is argued that challenge and hindrance stress may relate negatively and positively to deviance. As an employee gains resources, he or she is likely to become less stressed and thus less deviant. Rodell and Judge (2009) found hindrance stress had clear negative effects increasing deviance, however challenge stressors may also cause deviance because being stressors these cause anxiety (anticipating loss and failure to meet the challenge) therefore cause deviance.

The case of PTSD and DWB may be simpler as it is known that PTSD can invoke anger (Taft, Street, Marshall, Dowdall, & Riggs, 2007), anxiety and loathing in victims (Olatunji, Ciesielski, & Tolin, 2010), and terrorism instigates helplessness (Bongar et al., 2007), these feelings are likely to lead to channelling energies into counter-productive behaviours (Spector, Fox, & Domagalski, 2006).

The second type of voluntary behaviours that are reviewed here, are those which are often beneficial for the organisation. Such behaviours were first defined by Organ (1988, p. 4) as

“... individual behaviour that is discretionary, not directly or explicitly recognized by the formal reward system and that in the aggregate promotes the effective functioning of the organization. By discretionary, we mean that the behaviour is not an enforceable requirement of the role or the job description, that is, the clearly specifiable terms of the person’s employment contract with the organization; the behaviour is rather a matter of personal choice, such that its omission is not generally understood as punishable.”

These behaviours were called organisation citizenship behaviours (OCB). These have been studied extensively because of their contribution to organisations’ overall effectiveness (Chang, Johnson, & Yang, 2007). An ideal employee is one who takes part in OCB apart from organisational task performance (Bolino & Turnley, 2005).

Research has been inclined towards a negative relationship between stress and OCB (Chang et al., 2007; Eatough, Chang, Miloslavich, & Johnson, 2011; Motowidlo, Packard, & Manning, 1986; Organ, 1988). Paradoxically, few researchers have found a positive relationship as well (Bolino & Turnley, 2005). Being an extra-role behaviour that lies outside the normal job description, OCB can be seen as a burden on employees. Yet others have found no association (Paillé, 2011). Thus, it is interesting to investigate the OCB-stress relationship as research appears to be equivocal about it.

Challenge stressors, as means to gain resources, are likely to enhance OCB. However, Rodell and Judge (2009) found that the relationship could become negative if mediated by anxiety. This argument could be used to point up that living under terrorism and PTSD are both likely to be sources of anxiety; which may lead the employee to become more deviant and have

reduced OCB. On the other hand, Hall, Murray, et al. (2015) explain that in cases of extreme context (such as ongoing terrorism) people might find their resolve in helping others; there are possibilities that, in the case of PTSD due terrorism, instead of engaging in deviance, employees might engage in helping others. Thus, the above review shows that there are indications regarding the influence stressors (job-terrorism) might have on employee voluntary behaviours, these are not widely known or researched. This study will address some of these aspects, which are presented in Chapter 5.

### **2.5.5. Absence and Turnover intentions**

Next, I review the voluntary behaviour that are absence (Farrell & Stamm, 1988) and turnover intentions. These are widely studied in management sciences (Cotton & Tuttle, 1986; Griffeth, Hom, & Gaertner, 2000). Employee absence refers to “employee non-appearance for scheduled work and is recorded when it involves hours or days but not minutes” (Farrell & Stamm, 1988, p. 212). “Turnover intention was conceived to be a conscious and deliberate wilfulness to leave the organization” (Tett & Meyer, 1993, p. 261).

Meta-analysis has shown that challenge stressors have a negative, and hindrance stressors have a positive, relationship with intent to quit and absence (Podsakoff et al., 2007). However, the literature regarding exposure to terrorism, and PTSD and its relationship with turnover intention is not as clear. Most of that available in area of PTSD is related to aggression, bullying and sexual assault at the workplace which, results, in PTSD and/or burnout, leading to absence, intent to quit and/or actual turnover (Nielsen & Einarsen, 2012). It is simple to understand if the perpetrator is within the organisation and/or the employee holds the organisation liable; he or she is likely to wish to withdraw from the organisation. However, the premise of this study demands a different perspective. If the PTSD is caused by terrorism, would that lead to a desire to quit? Soaring migration figures are one way to explain that people might want to flee the country and not necessarily their organisation (Conner, 2016). However, in doing so, they also quit the organisation. This has hardly been addressed in management science research. Similarly, exposure to terrorism and PTSD may cause employees to voluntarily or involuntarily take days off. However, to the best of my knowledge, this also has not been addressed in literature.

## 2.6 Perceived organisational support

Perceived organisational support (POS) is the degree to which employees believe that their organisation values their contributions and cares about their well-being and fulfils socio-emotional needs (Eisenberger et al., 1986). Eisenberger and colleagues (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001; Eisenberger et al., 1986; Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002; Kurtessis et al., 2015; Rhoades & Eisenberger, 2002) have conducted noteworthy work in the area of POS, highlighting that employee stress can be reduced if employees perceive to have greater support (POS).

POS is based on social exchange and organisational support theories. These theories explain that, when employees feel cared for, they are likely to reciprocate with better performance, OCB, having higher job satisfaction; in the same vein, they are likely to be less dissatisfied, with lower negative behaviours such as withdrawal, turnover, absence and DWB (Kurtessis et al., 2015). Based on CoR theory, POS helps regain resources, which are likely to help reduce the detrimental consequences of stress and PTSD. The relevant literature and gaps are discussed in more detail in Chapters 6 and 9, and they lead to the positing of the following research question:

### **Research Question:**

3. *What is the nature and role of support for employees working while living under terrorism? Are perceptions of support beneficial? Are there any specific nuances? Does support buffer the influence of stressors on outcomes?*

## 2.7 Psychological Capital

Psychological Capital (PsyCap) is likely to influence the extent to which one takes stress and how it further influences one's behaviours (Avey et al., 2009; Avey, Luthans, & Youssef, 2010). It is found to help employees to deal with stress effectively, which ultimately leads to positive outcomes (Youssef & Luthans, 2007). PsyCap is an important tenet of positive organisational behaviour. PsyCap is defined as "an individual's positive psychological state of development and is characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and

adversity, sustaining and bouncing back and even beyond (resilience) to attain success” (Luthans et al., 2007b; p.3).

Various studies of the factors of PsyCap show that each of the four dimensions within PsyCap can affect PTSD. However, PsyCap itself has not been used to relate it with PTSD, which might be worth exploration. For instance, highly resilient employees are likely to deal better with trauma as compared to those with lower resilience (Butler et al., 2007; Hobfoll et al., 2012) and a similar effect has been shown for hope (Ai, Cascio, Santangelo, & Evans-Campbell, 2005), optimism (Ai, Evans-Campbell, Santangelo, & Cascio, 2006) and coping self-efficacy (Benight & Bandura, 2004).

The evidence suggests that PsyCap can be built and enhanced by the employee as well as by the organisation (Luthans, Avolio, et al., 2007). It enables employees to deal with the everyday stress of work life positively and be productive while contributing to the well-being of the employee. People exposed to the same events or incidents may have different reactions, depending on their PsyCap (Luthans, Vogelgesang, & Lester, 2006). Furthermore, (Avey et al., 2009) found that PsyCap, as a core construct, enables a person to deal with stressful environments. Luthans and colleagues are of the view that the core construct of PsyCap can provide better understanding and aid to deal with stress, rather than each individual factor.

PsyCap is a vital form of individual resource which benefits both the individual and the organisation. It is deemed important by contemporary organisational behaviour researchers as a vital antecedent for job satisfaction, productivity, commitment and citizenship behaviours while reducing undesirable outcomes such as deviance, absence and turnover of employees (Avey, Reichard, et al., 2011). Moreover, it is an important resource as it can help employees with both job stress and PTSD (Luthans, Vogelgesang, et al., 2006). Thus, the utility of PsyCap is swiftly gaining strength (Avey et al., 2010). Research on PsyCap has grown quickly in the last decade but mostly in the North American (mainly US) context (Abbas & Raja, 2015). As stated above, Luthans and colleagues (2006; 2007; 2015) are of the view that the predictive power of PsyCap as a construct is often greater than that of individual factors. Therefore, collectively, the four dimensions may help in case of PTSD, and hence employees exposed to terrorism may benefit

from their PsyCap. PsyCap is a relevant variable for this study because hope is related to the ability to cope with adversity; optimism is positively related with mental health; high self-efficacy relates with low job stress and burnout as well as helps people to persevere in the face of adversity; and resilience is shown to help people deal with risk and adversity (Abbas and Raja, 2015). These factors make PsyCap a useful buffer in the context of on-going terrorism related to job outcomes. Yet, how does PsyCap relate with job stress and PTSD, and what is its influence on employee outcomes? Chapters 4 and 7 discuss the potential role of PsyCap in relation to job stress and PTSD, leading us to a final research question:

**Research Question:**

4. *What role do individual psychological resources play in explaining the detrimental influence of job stressors and PTSD? Are they helpful in dealing with job stressors and PTSD?*

## **2.8 Key Research Gaps**

This study builds on the CoR approach which suggests that employees have limited resources and taxing and demanding situations that take a toll on their resources, leading to stress, which can in turn influence employees' performance, job satisfaction and voluntary behaviours. Based on positive organisational behaviour (POB) (Luthans, 2002) and organisational support theory (Eisenberger et al., 1986; Kurtessis et al., 2015), these personal and organisational resources may be helpful in reducing the job stress that employee experience in their organisation. Since these have not been widely researched, especially in non-western cultures, this study aims to understand their interactive/additive effects on employee outcomes.

Secondly, terrorism is a prevalent threat (Toker et al., 2015) but is presently under-studied in the organisational sciences (James, 2011a). With growing threats and acts of terrorism, it is likely that this will detrimentally influence employees but its nature is largely unknown (Toker et al., 2015). Researchers have not focused on organisational factors and their relationships in the context of high exposure to terrorism; this thesis will address this gap.

In addition, there are other gaps in extant knowledge around the possible roles of PsyCap and POS, and their potential moderating/mediating effects on the relationships of job stress and

PTSD towards employee outcomes. Clearly, there are gaps in the literature where Pakistan can provide a unique context on which to draw to inquire about how the stress of living under terrorism will influence employees, and to consider the complex and dynamic roles of PTSD, job stress, POS and PsyCap as determinants of employee outcomes.

Pettigrew (2005) elaborated that a current concern is to study interdisciplinary, multi-cultural perspectives, identifying terrorism and its effect on organisations as a key theme. However, he expressed the fear that many researchers will not indulge in this area of inquiry due to their myopic view of researching only within their narrow domains. Despite the importance of the research in areas associated with terrorism and post trauma, organisational researchers tend to shy away from it.

Thus, there is a greater need to address more public issues including terrorism (Kelman, 2005) in relation to organisations and employees, both in public and private sectors. This research thus attempts to explore the extent to which these events influence people working in organisations. It aims to answer questions as to how far people have been stressed by terrorism and, at the same time, how far they are stressed due to job stress. Furthermore, this inquiry seeks to determine the influence of PTSD and job stress on employee behaviours and attitudes. Lastly, it asks whether POS helps employees to deal with the situation, and whether their psychological resources are a source of strength for them. The specific research questions of this PhD study are given below in table 2-2.

**Table 2-2: Research Questions**

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<b>1</b>	What influence does the terrorism context (around PTSD) have on Pakistani workplaces and their employees?
<b>2</b>	What influence do stressors (job stressors and PTSD) have on Pakistani employee outcomes? Is one stressor more dominant? Do job stressors and terrorism stressors (PTSD) interact and have a more detrimental influence on outcomes?
<b>3</b>	What is the nature and role of support for employees working while living under terrorism? Are perceptions of support beneficial? Are there any specific nuances? Does support buffer the influence of stressors on outcomes?
<b>4</b>	What role do individual psychological resources play? Are they helpful in dealing with job stressors and PTSD?

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## **2.9 Summary**

This literature review highlighted gaps in existing studies from which relevant research questions were derived. First, the theory of CoR was discussed to highlight how this was used in building the questions and augmenting all of the other theories used with regards to each question. The literature on job stress was then introduced, with the focus on the challenge-hindrane framework. It was followed by the literature on the stress of terrorism in the context of management science. Stress of terrorism was next covered with regard to PTSD, which is widely used as a common stress outcome of terrorism.

Next, the relevant outcomes of stressors (job and terrorism) were reviewed. These were: performance, job satisfaction, voluntary behaviours including absenteeism, and turnover intentions. This led to the review and brief justification for the selection of moderator and mediator that is, POS and PsyCap. Each section concluded with a reference to the chapters or papers where the variables were presented in more detail and the relevant research questions for the variables were reviewed. A summary is provided below in table 2-3, stating the respective chapters in which the research questions are addressed, along with the literature covered, and study type.

Before going into the literature review I briefly outline the variables each paper covers.

Chapter 4 is a theoretical paper which looks at the role of PsyCap as a possible buffer in reducing the adverse consequences of job and terrorism stressors. Chapter 5 is a journal article

based on the qualitative study and discuss job performance and voluntary behaviours, Chapter 6 discusses POS, Chapter 7 covers PsyCap, job stressors, PTSD, job satisfaction, and turnover intentions, and Chapter 8 looks at POS, job stressors, PTSD and burnout.

**Table 2-3: Summary: List of Chapters and paper titles, with research questions, literature covered, study type, tools used and sample sizes**

Chapter no. and Paper title	Research question addressed	Aim	Theory utilised	Study Type
4: Job Stressed Employees Living Under Terrorism: Does Positive Organisational Behaviour Provide a Lens for Help (and Hope)?	1, 2, 4	To theoretically explain the role of PsyCap as a possible buffer in reducing the adverse consequences of job and terrorism stressors	Demand Resource, PTSD, Positive Psychology	Literature review
5: Working in a Terrorist Region: HR Manager Perceptions	1, 2	To highlight the interplay of job and terrorism stressors and their influence on employees living under on-going terrorism	Conservation of resources	Study 1: Qualitative
6: Security-Related Perceived Organisational Support: An Exploration from Pakistani Workplaces	3	To determine the nature of POS, and test the contextually different nature of POS in the context of ongoing terrorism	Conservation of resources, Organisational support theory, social exchange theory	Study 1: Qualitative & Study 2: Quantitative
7: Job Stress and Post Traumatic Disorder on Job Outcomes: The Mediating Effects of Psychological Capital	1, 2, 4	Present PsyCap as a resource that can explain the detrimental influence of job stressors, PTSD, on job satisfaction, and turnover intentions	Positive Psychology	Study 3: Quantitative
8: Challenge-Hindrances stressors and its effect on job burnt in the employees living under on-going terrorism: the moderating role of organisational support	1, 2, 4	To test the POS and contextual POS as moderators in job stressors, PTSD and burnout relationships	Conservation of resources, Organisational support theory, challenge hindrance theory	Study 2: Quantitative Study 3: Quantitative

## **Chapter 3- Methodology and Design**

### **3.1. Introduction**

This research was motivated in part by my lived experience of on-going terrorism. It was initiated with a view to answering: *how does the stress of terrorism and one's job influence employees?* A meaningful answer could not be found in the extant literature, which inspired this study. With growing threats and acts of terrorism, it is likely that the context of ongoing terrorism may detrimentally influence employees, yet those effects are largely unknown (Toker et al., 2015). Researchers have rarely focused on organisational factors, such as job stressors and employee outcomes and well-being, and their relationships in the context of high exposure to terrorism. This study was motivated to fill these gaps.

Section 3.1 of this chapter introduced the chapter with the motivation for this study. Section 3.2 outlines the research gaps in the literature and questions which derive from them, providing the basis and direction of the ensuing sections. Next, section 3.3 highlights the paradigmatic consideration for this study, which includes the choice of paradigm and the research assumptions. Section 3.4 covers the study design, which then leads to the studies. The studies 1-3 are presented in section 3.5-3.7; each section provides the rationale for the study, and the data collection methods and procedures. Since the study was in a sensitive subject area, ethical considerations are covered in a separate section (3.8), which is followed by section 3.9 which details the data management. The chapter is concluded in section 3.10, which summarizes by providing the research questions, the studies and papers that cover the questions, along with the analyses techniques used.

### **3.2. Research Gaps and Points of inquiry**

This research asks: what are the most important outcomes influenced by the stressors? Given the plethora of employee outcomes from job stressors and in general in case of terrorism/PTSD, the study aims to address, which are the most salient employee outcomes in the context of on-going exposure to terrorism?

Next, it investigates the roles of PsyCap and POS in mediating/moderating the direct detrimental influences of job stress and PTSD towards employee outcomes in the context of

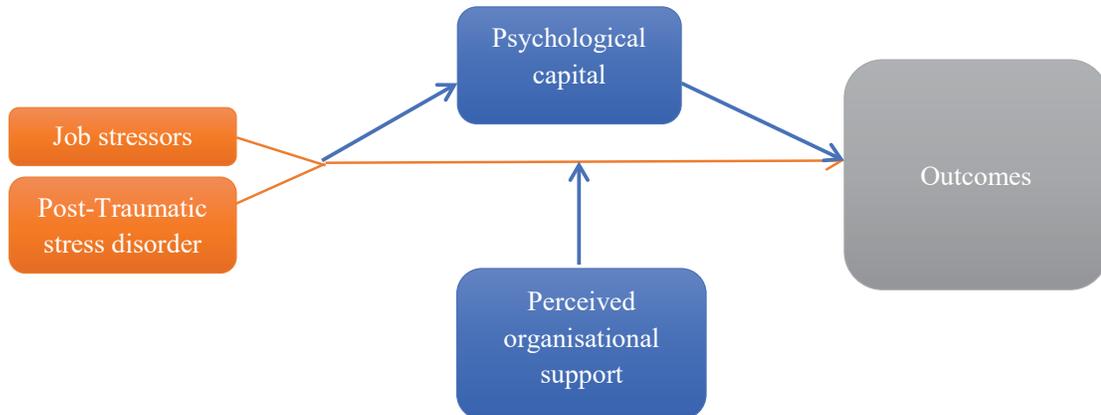
terrorism. Based on positive organisational behaviour (POB) (Luthans, 2002) and organisational support theory (OST) (Eisenberger et al., 1986; Kurtessis et al., 2015), personal and organisational resources may be helpful in reducing/explaining the job stress that an employee experiences in his or her organisation. Since these have not been widely researched, especially in non-western cultures, it is important to understand their interactive effects on employee outcomes.

Clearly, there are gaps in the literature and Pakistan provides a unique opportunity with which to inquire about the stress of living under terrorism. This study looked at the influences on employees and the complex and dynamic relationship of PTSD, job stress, POS and PsyCap as determinants of employee outcomes. The following sections cover the study methodology and the rationales for its selection to respond to the research questions.

### **3.3. Paradigmatic considerations and research design**

Given its coverage and gaps, existing research on terrorism and trauma provides some insights about its effects on people. However, these findings do not relate to employees working in on-going terrorism-afflicted areas. Similarly, the literature on job stressors is detailed but lacks contextual insights with respect to how employees live with, and are influenced by terrorism and job stressors. Therefore, the outcomes of job stressors, stress of terrorism-PTSD are not uniformly or equivocally known. The review in Chapter 2 highlighted that it is unclear which outcomes might be relevant or most strongly affected in this particular context. Therefore, an initial framework was developed, drawing on various streams of literature. As can be seen in figure 3-1, the outcomes were not stated because there are numerous, and there are no consistent research findings on which outcomes may be important in the context of this study. Thus, the theoretical framework was designed with the flexibility to first explore and then develop further. This is the very reason that the framework presented in 3-1 could not be tested without first being contextually-informed. This is discussed 3.4 and 3.5 in more detail.

**Figure 3-1: Theoretical framework**



### ***3.3.1. Paradigm: Pragmatism***

The paradigm and one's choice of the research methods should be aligned and serve to respond to the research question (Saunders, Lewis, & Thornhill, 2009). Having the research question as the main focus, and developing strategy and tools to address the question, fits well with a pragmatic approach (Johnson & Onwuegbuzie, 2004). In the following section, the design of the study endeavours to demonstrate this. Pragmatism allows the researcher to address the problems of the real world and use the methods and tools needed to answer the questions, without being bound to qualitative/quantitative or objective/subjective inquiry. Based on the question and issue at hand, the researcher's methodological choice is to find the means by which to answer/resolve the research issue in the best possible way (Feilzer, 2009).

Therefore, for this study, a combination of interpretivist, qualitative inquiry and a positive, quantitative methodology are employed. As stated earlier, the existing literature provides some insights into the nature of the relationships between the variables of the study. However, the outcomes of job stressors were too many, such as job satisfaction, turnover, absence, deviant behaviours, citizenship behaviours, abusive supervisor, commitment, engagement, burnout, incivility, performance, innovative behaviours, and employee well-being (Abbas & Raja, 2015; Hollebeek & Haar, 2012; Lepine et al., 2005; Podsakoff et al., 2007). On the other hand terrorism-

PTSD is not much researched in the context of employee outcomes. The effects of the interplay of job stressors and PTSD are unknown in the context of ongoing terrorism (Junaid & Haar, 2015). Thus it led to the need to explore. Before developing and testing hypotheses, it became evident that a qualitative study that would explore the effects of stressors on employees' outcomes was needed. The relevant outcomes would in turn help to inform hypotheses for testing via a large-scale quantitative inquiry. This initial study thus helped surface key factors for consideration in the theoretical framework and highlighted the need to conduct not two but three sequential studies.

### **3.3.2. Research assumptions**

Several assumptions underpin the research approach of this study. First, it is assumed that, with the prevalence of terrorism in Pakistan, there will be some stress of terrorism for workers. Second, terrorism causing economic instability and physical insecurity also meant that workplaces might be affected both physically and operationally, thus inducing possible job stress. Third, it was anticipated that there could be numerous attitudinal and behavioural outcomes due to the stress of terrorism and one's job.

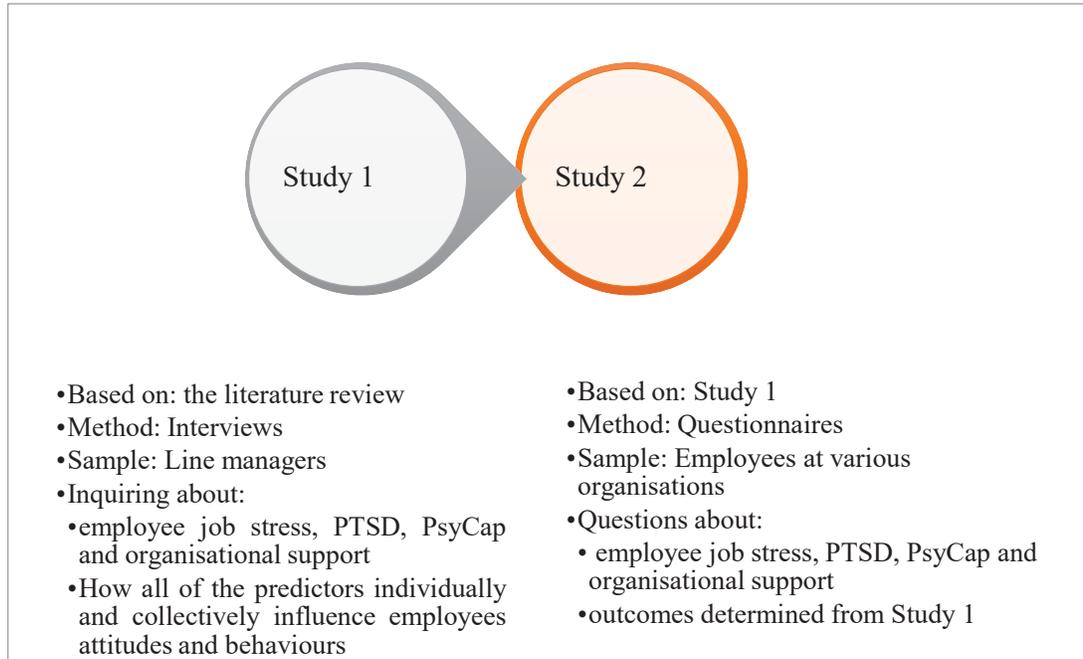
### **3.4. Study design**

The research was based on three studies, each informing the next. The following section explains how each study was developed, the research questions it addressed and the ways in which it led to and informed the next studies. The initial research design was based on two studies, with the first intended to inform the second. However, upon completion of the first study, there was a need to conduct a second study before embarking on the third and final study. The process, rationale, and the tools of each study are discussed below, with these sections showing how the study evolved and the changes that were made to the original design of two studies, leading to a revised design involving three studies. The terms "initial study design" and "revised study design" are used to explain the changes and the differences as they happened.

The research was conducted online and the target population was from Pakistan, including in the Khyber Pakhtunkhwa province and FATA, the worst terrorism-affected areas (South Asia Terrorism Portal, 2016). With the prevalence of terrorism in Pakistan, for the safety

of the researcher, data collection was undertaken exclusively online. Further details about the data collection of each study are discussed under the respective study.

**Figure 3-2: Initial Design: Outline of study 1 informing study 2.**



### 3.5. Study 1: Qualitative (interpretivist) inquiry

Qualitative study is often undertaken to understand the contextual meaning in a context of interest. The purpose is not to create generalizable findings but to attain detailed insights (Gephart, 2004). It is especially useful at the stage of exploration as it enables the researcher to identify features and factors which can be then tested on a larger scale. Such inquiries are based on interpretivism, which aims to provide different people’s view of reality (Denzin & Lincoln, 2000) through narratives which explain the situational details of a particular context (Saunders et al., 2009). Indeed, the first study required such an approach to produce a contextualised understanding of how the stressors influence employees living under terrorism.

#### 3.5.1. Rationale

Drawing on the existing literature and gaps identified therein, the first study was necessarily exploratory and qualitative in character. Managers of different organisations were interviewed via Skype/telephone. To explore responses to the research questions, the informants

were asked about employee experiences of stress and its influence on their behaviours. There were several benefits to conducting such interviews. It was considered easier or less stressful for managers to talk about employees rather than talk about their own experiences (if they are painful). Further, the distal nature of the questions (about others and not the self) also encouraged greater clarity in providing information regarding the PTSD context, as well as regarding the nature and relationship of job stress, POS and PsyCap. The first study aimed to address the following research questions:

### **Research Questions for study 1**

*RQ1. What influence does the terrorism context (around PTSD) have on Pakistani workplaces and their employees?; and*

*RQ2. What influence do stressors (job stressors and PTSD) have on Pakistani employee outcomes? Is one stressor more dominant? Do job stressors and terrorism stressors (PTSD) interact and have a more detrimental influence on outcomes?*

#### **3.5.2. Semi structured interviews**

The interviews were voluntary, making it convenient and less stressful for informants who were given a range of times from which to choose a Skype/telephone meeting. It was made explicit to informants that any question which caused them discomfort could be skipped and that the interview could be terminated at any time (see Appendix A for the interview information sheet and Appendix B for the consent form).

Each manager could give responses about more than one employee; thus, a single interview could elicit responses concerning a set of employees. No other tool could have been used as effectively to attain the findings in the given circumstances. Since the Massey University Human Ethics Committee (MUHEC) had instructed that data should be collected online only, it was not feasible to conduct focus groups. Further, it was essential to ask informants about the impacts of both job and terrorism stressors in the context on employees living under on-going terrorism. Interviews were thus deemed the most appropriate mode of inquiry to attain that data.

The study used semi- structured interviews. Such interviews are often the sole source of data in qualitative research; they provide flexibility to delve in an in-depth process of attaining detailed

information, along with some structure to stay focused on the areas of interest (DiCicco-Bloom & Crabtree, 2006). This could not have been achieved through close ended structured interview, since my study needed the insights of the informants regarding the context, to develop further questions. Similarly, unstructured interview were also not suitable, because (a) these are often used in conjunction with observation (DiCicco-Bloom & Crabtree, 2006), (b) and these are used when there are no particular questions designed. However in this research the initial questions were known, but what would stem out of the answers was required to inquire further. There were four broad, open-ended questions which related to the key research objectives:

1. To what extent are employees of their organisation under traumatic stress (PTSD) and job stress, and how do they influence employee behaviours/outcomes?;
2. Are there any/some incidents or anecdotes about employee outcomes in relation to terrorism (then probe to determine whether employees are more absent, dissatisfied, angry, or helpful);
3. Managers' opinions about whether employees think that the organisation is supportive of them? (then ask for examples of how the organisation provides POS); and
4. Are some employees better than others at handling job stress in trying times of terrorism? What employee features seemed to help in this respect?

### ***3.5.3. Data collection procedure***

The managers were contacted via an email which briefly introduced the research and informed them that the interview was voluntary (see above). The interviewees were contacted using the researcher's personal network, and judgmental/purposive sampling. In order to avoid undue stress, anyone who had recently had an immediate loss was not interviewed. Managers sought for inclusion in the study were line/HR managers working in different organisations across a range of industries and sectors. Data were collected from September to October 2015.

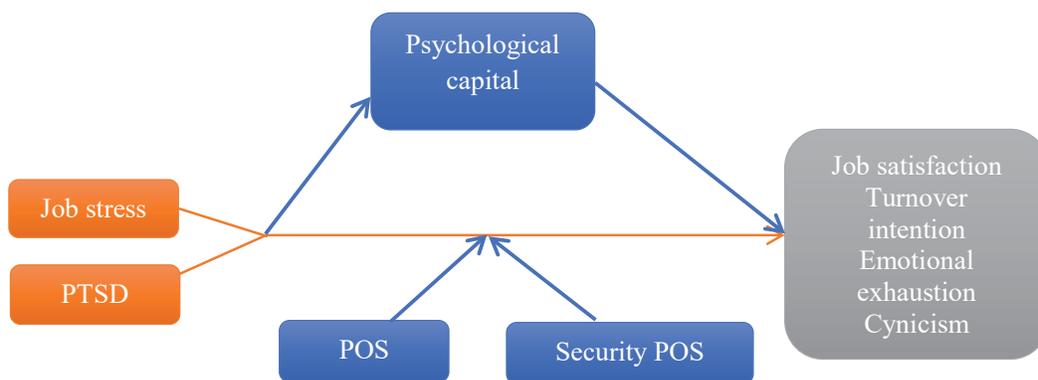
The reason for selecting managers as "informants" through non-probabilistic sampling was, as Mays and Pope (1995) explain, to identify specific participants "who either possess characteristics or live in circumstances relevant to the social phenomenon being studied" (p.110). In such studies, the purpose is not to generate a representative sample but rather to identify sources

who can enable exploration “and produce a preliminary theoretical explanation before deciding which further data to collect” (Mays & Pope, 1995, p. 11). It has been suggested that between six and 12 interviews are needed, especially if data are not highly heterogeneous (Guest, Bunce, & Johnson, 2006).

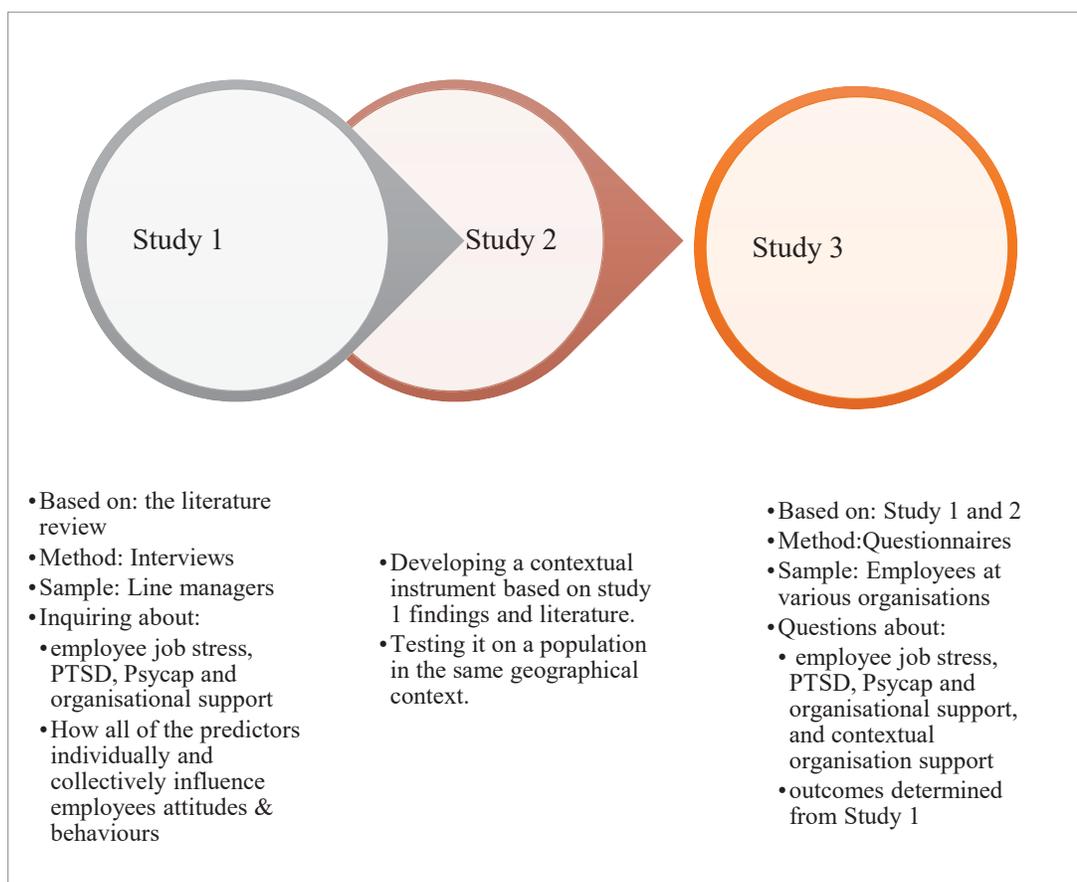
### 3.5.4. Analysis

Qualitative (thematic/content) analysis of the interviews was structured via the use of Nvivo 10. The details of analysis are discussed in Chapters 5 and 6. However, it is important to point out here that study one not only identified the outcomes of the stressors, but also pointed that the support that employees might want from the employer differs from what is conventionally known in the literature as POS. This meant that there was a need to develop a context-specific organisational support construct (presented in Chapter 6). It also meant that an untested construct could not be integrated into a large-scale survey. For this, a second study was designed, primarily to test a construct based on the findings of study one, this is discussed in section 3.6. With the important outcomes known, the model was revised (see figure 3-3 below). Before testing this model, it was essential to formulate and test the contextually-informed instrument for security-related POS. This meant that the design was also adjusted further (see figure 3-4).

**Figure 3-3: Revised Proposed Model for the study**



**Figure 3-4: Revised Design: Outline of study 1 informing study 2, leading to study 3.**



### **3.6. Study 2: Quantitative (positivist) inquiry**

Positivist inquiries are based on hypotheses testing, with the aim of being objective and value free. Studies adopting a positivist view address the problem often from a quantitative perspective, with the aim is deduce and generalize. Such studies often are based on validities, reliabilities and causality (Gephart, 2004; Johnson & Duberley, 2000a). Study 2 takes a similar approach, by using the findings of study 1, and developing a scale that can be tested and then used in study 3 (large-scale study). To do so, it used a sample from the similar population frame as was used for the third study because the results of study 2 can only be generalizable to the population from where the sample is taken.

#### **3.6.1. Rationale**

Without going in detail of the findings, which are discussed in Chapter 5, a brief description of study 2 is provided to rationalise the choice of changing the study design and

highlight the need for study 2. The qualitative study identified that the employees needed physical security at work place. Based on the qualitative findings of Study 1, Study 2 tested Security-Perceived Organisational support (Security-POS). The objective was to test the validity of the distinct nature of security-POS (found in study 1) from the existing measure of POS. Since there was no study investigating the nature of POS in the context of on-going terrorism, neither was any such tool available. It was considered vital that an instrument should be developed to address the contextual POS of security. Therefore, the main purpose of the second study was to measure the contextual Security-POS. This study would help create and validate the instrument (see appendix C for the survey), and thus provide confidence to embark on the third study. The research question for the study 2 is given below, the set of hypotheses are not provided here, as those related to the findings and are provided in chapter 5.

### **Research Question for study 2**

*RQ3. What is the nature and role of support for employees working while living under terrorism? Are perceptions of support beneficial? Are there any specific nuances?*

#### **3.6.2. Data collection**

Data were collected in Pakistan from employees working in different professions such as banking, retail, NGOs, schools, universities, mobile service providers, home delivery and food chains. A total of 191 invitations were sent via email through the personal network (see appendix C for the invitation). Thus, purposeful sampling was undertaken to attract respondents (Coyne, 1997), meeting both University ethical and NATO guidelines. Overall, 146 employees responded to the survey (a 76.4% response rate). The response rate was relatively high. This may be due in part to the pertinence of the topic to the population of Pakistan, and to participants being approached through personal networks.

Participants ranged from 22 to 68 years, with an average age of 31.7 years (SD=7.9 years). They tended to be male (78%), married (55%) and a parent (51%). Average job tenure was 5.5 years (SD=5.8 years) and, on average, they worked 42.4 hours per week (SD= 11.6). The majority of respondents were highly educated, with 62% having a graduate qualification (e.g. Master's degree or MBA); this over-educated sample is likely because survey was conducted online,

thereby targeting an educated group. By industry sector, 41% of respondents worked in the private sector, 39% worked in the public sector and 21% worked in the not-for-profit sector.

### 3.6.3. Measures

First, various security and safety measures were reviewed to determine if a construct tapping into the contextual variable already existed in the literature. Relevant to this were the works of Cox and Cheyne (2000) and Nissen, Birkeland Nielsen, Solberg, Bang Hansen, and Heir (2015) who looked at safety in the workplace. The items used in their two instruments are provided in Table 3-1; those added from the pilot survey questionnaire are marked with a \*.

**Table 3-1: Items reviewed for the Security POS**

Items
<p><b>Management commitment</b></p> <p>In my workplace, management acts quickly to correct safety problems*</p> <p>Management acts decisively when a safety concern is raised</p> <p>In my workplace, management turn a blind eye to safety issues</p> <p>Corrective action is always taken when management is told about unsafe practices*</p> <p>In my workplace, managers/supervisors show interest in my safety</p> <p>Management acts only after accidents have occurred</p> <p>Managers and supervisors express concern if safety procedures are not adhered to*</p>
<p><b>Priority of safety</b></p> <p>Management clearly considers the safety of employees of great importance*</p> <p>I believe that safety issues are not assigned a high priority*</p> <p>Safety procedures are carefully followed*</p> <p>Management considers safety to be equally as important as production*</p>
<p><b>Personal appreciation of risk</b></p> <p>I am sure it is only a matter of time before I am involved in an accident</p>
<p><b>Personal priorities and need for safety</b></p> <p>It is important that there is a continuing emphasis on safety</p> <p>A safe place to work has a lot of personal meaning to me</p>
<p><b>Work environment</b></p> <p>Operational targets often conflict with safety measures</p>
Source: (Cox & Cheyne, 2000)
<p><b>I am sure it is only a matter of time before my workplace is subject to another terrorist attack</b></p> <p><b>I feel safe when I am at work*</b></p>
Source: (Nissen et al., 2015)

A further four items were created, based on the contextual POS found in Study 1 (see Table 3-2).

**Table 3-2: Items created for Security POS**

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My organisation values workplace security
My organisation provides armed security at my workplace
I feel safe in my workplace from the threat of terrorism
My organisation takes terrorism-related concerns seriously

---

**3.6.4. Analysis**

For the analysis of the Security-POS, checking of the reliability of the newly-created scale was needed, and a determination made as to whether it was perceived as different from the existing POS instrument of Eisenberger et al. (1986). This was done using exploratory factor analysis (EFA) (principal components, varimax rotation) with the data split into two distinct factors as expected: Security-POS and POS. This approach was meant to determine if the four items (based on qualitative study findings) for Security-POS loaded upon their own factor, as distinct from the eight items for POS. Further, the items chosen from other scales (Cox & Cheyne, 2000; Nissen et al., 2015) also load on the Security-POS scale, and have effective reliability. Next, confirmatory factor analysis (CFA) was used to confirm that the two-factor model of Security-POS and POS was better than one factor model where all items are combined on a single construct. Notwithstanding this, convergent and discriminant validity were used to determine construct validity (Campbell & Fiske, 1959). The results of this study, along with study one, enabled the formulation and execution of the final study. We found POS and Security POS to be distinct.

**3.7. Study 3: Quantitative (positivist) inquiry**

The aim of this study was to use the findings of studies 1 and 2, and collect data from a large number of people so that generalisations could be developed. Being informed by literature and the qualitative and quantitative study findings, I felt confident to undertake a quantitative study. When the purpose is to collect large numbers of responses to develop generalisations then quantitative (survey-type) studies are useful ways to collect data (Johnson & Duberley, 2000b; Saunders et al., 2009). Once the important variables were highlighted via study 1, and the contextual Security-POS developed, tested and confirmed. It made way for study 3 to be

developed and conducted. Like study 2, this study also used a positivist approach to respond to the research questions.

### **3.7.1. Rationale**

The overall purpose of the research was to find the influence of terrorism-PTSD and job stressors on employee outcomes, and determine the possible roles of POS and PsyCap in buffering/explaining the adverse influences the stressors. For this, first the qualitative study was conducted, and then second study developed and tested the contextually informed instrument. With all the findings from study 1 and 2, the next step to attain the purpose of the research, was to conduct a large-scale study. Since in-depth knowledge was available, and contextually tested on a sample, to generalize the finding a survey was needed. For safety reasons, data collection was performed using an online survey (this is explained further in Section 3.8). The third study addressed the following research questions.

### **Research Questions for study 3**

*RQ2. What influence do stressors (job stressors and PTSD) have on Pakistani employee outcomes? Is one stressor more dominant? Do job stressors and terrorism stressors (PTSD) interact and have a more detrimental influence on outcomes?*

*RQ3. What is the nature and role of support for employees working while living under terrorism? Are perceptions of support beneficial? Are there any specific nuances? Does support buffer the influence of stressors on outcomes? and*

*RQ4. What role do individual psychological resources play? Are they helpful in dealing with job stressors and PTSD?*

### **3.7.2. Data collection**

The survey was developed on Survey Monkey and also in a Word document (MS Office). Based on personal contacts, respondents were emailed the survey link, the Word document providing an information sheet stating the theme and objectives of the study (see appendix D) along with the consent form (see appendix E). In FATA and other regions, internet access is not available at all times and there is inconsistent connectivity. In those regions, it was thus easier for the respondents to receive the questionnaire in Word document form.

### ***3.7.3. Target Population and sampling***

For the questionnaire, the target population included people from different sectors and professions (see Chapters 7 and 8). Personal contacts and networks were used to collect data. With the researcher's 15 years of work experience at higher education institutions, a strong network formed a key source for potential respondents and data collection, and had considerable 'reach' in all parts of the country, including those worst hit by terrorism. Purposeful sampling was undertaken to attract respondents (Coyne, 1997) for two key reasons. At first, 300 respondents were contacted. Then, snowball sampling was employed. It is estimated that some 800 employees were contacted in total; 547 people visited the online survey but only 416 completed the survey.

Data were collected in Pakistan (from all major cities, especially Khyber PakhtunKhawa, and Federally-administered Tribal areas FATA) during June-August 2016. The data collection was challenging for several reasons. First, it occurred during the month of fasting (Ramadan), meaning that people were not drinking or eating from 4:30am-7:30pm. The temperature in Pakistan in the summer (June-August) is between 38-52 degrees Celsius. The electricity load-shedding (power cuts) are normally between four to 10 hours per day, with 14 or more hours in some areas (Khan, 2014). These conditions meant that respondents were in excruciating heat and often without electricity. Data collection thus took four months and, as more responses were received, additional invitations were sent out. The timeliness and relevance of the research may have prompted some respondents to complete and forward the survey to others.

On average, the participants were 32 years (SD=7.4 years), married (51%), male (66%), and non-parents (65%). By education, respondents were highly education with 56% having a master's degree, 27% having an above master's degree qualification, and 13% have a university degree. The remainder had high school qualification equivalent (four percent). By sector, just over half were in the private sector (52%), followed by the public sector (36%) and not-for-profit (12%).

### 3.7.4. Measures

English is the medium of instruction in Pakistan, so the questionnaire was not translated to the native language Urdu. All variables selected for inclusion in the survey were pitched at the individual level. Pakistani academic studies such Abbas and Raja (2015); Raja and Johns (2010); and Raja, Johns, and Ntalianis (2004) have used similar questionnaires and attained accurate results, which means that these instruments could be used in Pakistan without adapting them contextually. The only exceptions concerned PTSD and Security-POS. However, a similar PTSD scale had been used in Pakistan research (See research done in Swat Valley, to determine prevalence of PTSD; and on earthquake victims respectively; Khalily, 2011; Naeem et al., 2011). Security-POS items which were derived from study 2. All variables had high reliabilities (Cronbach alpha values were between 0.70 to 0.95). Specific measure details are as follows:

#### a. *Hindrance and challenge stressors*

Stressors were measured using an 11-item scale (Cavanaugh et al., 2000) and each measured on a scale of 1-5 (with 1=produces no stress, 3=produces some stress and 5=produces a great deal of stress).

#### b. *Post-traumatic Stress Disorder (PTSD)*

Hovens et al. (1994) used a PTSD measure with three sub-scales corresponding to the symptom clusters of (1) re-experiencing (six items), (2) avoidance (nine items) and (3) hyperarousal (seven items). Summing the scores on these sub-scales led to a total score of PTSD symptom severity. Each of the 22 items could be answered on a 4-point scale, ranging from 1=not at all to 4=very much. This instrument from the Diagnostic Statistical manual IV (American Psychological Association, 2013) is one of the most widely-used inventories for measuring PTSD. While analysis typically focuses on scores at 52 or greater as suffering from 'acute' PTSD, it has also been used in a broader sense where low scores represent low levels of PTSD and, conversely, high levels represent high levels of PTSD (Williams et al., 2009).

#### c. *Psychological Capital (PsyCap)*

An abbreviated 12-item scale (PCQ-24) (Luthans, Avey, Avolio, Norman, & Combs, 2006) was used to measure PsyCap. According to Luthans et al. (2015), the PCQ-12 has been

used and validated in earlier published studies (Avey, Avolio, & Luthans, 2011). Items are scored on a six-point scale ranging from 1=strongly disagree to 6=strongly agree.

*d. Perceived Organizational Support (POS)*

POS was measured with eight items, or a shortened version of POS (Eisenberger et al., 1986). Items were measured on a scale from 1=strongly disagree to 7=strongly agree.

*e. Security POS*

Security-POS was measured through four items developed in study 2. The items were measured on a scale of 1=strongly disagree to 5=strongly agree

*f. Job satisfaction*

For job satisfaction, a 5-item scale was used (Judge et al., 2005). Items were measured on a scale of 1=strongly disagree to 5=strongly agree.

*g. Turnover intentions*

For turnover intentions, a 4-item scale was used (Kelloway, Gottlieb, & Barham, 1999). Items were measured on a scale from 1=strongly disagree to 5=strongly agree.

*h. Burnout*

Job burnout was measured using 10 items (Maslach & Jackson, 1981), with the scale coded 1=never to 5=always. Emotional Exhaustion and Cynicism dimensions were measured with five items each.

### **3.7.5. Hypotheses**

Study 3 covered the following hypotheses. The purpose was to determine the effects of job stressors and PTSD on employee outcomes, while testing the role of PsyCap and POS.

#### Hypotheses relating Job stressors, PTSD, PsyCap and Outcomes

Hypothesis 1: (a) Challenge stressors will be positively related, and (b) hindrance stressors will be negatively related, to job satisfaction;

Hypothesis 2: (a) Challenge stressors will be negatively related, and (b) hindrance stressors will be positively related, to turnover intentions;

Hypothesis 3: PTSD will be (a) negatively related to job satisfaction and (b) positively related to turnover intentions, at levels lower than job stressors;

Hypothesis 4: PTSD will moderate the relationships between challenge stressors and job outcomes, buffering the beneficial effects of challenge stressors;

Hypothesis 5: PTSD will moderate the relationships between hindrance stressors and job outcomes, exacerbating the detrimental effects of hindrance stressors;

Hypothesis 6: PsyCap will be related to job satisfaction, and mediate the influence of (a) challenge stressors, (b) hindrance stressors and (c) PTSD; and

Hypothesis 7: PsyCap will be negatively related to turnover intentions, and mediate the influence of (a) challenge stressors, (b) hindrance stressors and (c) PTSD.

#### Hypotheses relating Job stressors, PTSD, POS and Outcomes

Hypothesis 1: Challenge stressors will be positively related to (a) emotional exhaustion (b) and negatively to cynicism;

Hypothesis 2: Hindrance stressors will be positively related to (a) emotional exhaustion and (b) cynicism;

Hypothesis 3: PTSD will be positively related to (a) emotional exhaustion and (b) cynicism;

Hypothesis 4: POS will be negatively related to (a) emotional exhaustion and (b) cynicism;

Hypothesis 5: Security POS will be negatively related to (a) emotional exhaustion and (b) cynicism;

Hypothesis 6: POS will moderate the relationships between stressors and (a) emotional exhaustion and (b) cynicism, reducing the detrimental effects of stressors and PTSD and enhancing the beneficial effects of challenge stressors; and

Hypothesis 7: Security POS will moderate the relationships between stressors and (a) emotional exhaustion and (b) cynicism, reducing the detrimental effects of stressors and PTSD and enhancing the beneficial effects of challenge stressors.

#### **3.7.6. Analysis**

To examine the direct effects of challenge and hindrance stressors on job satisfaction and turnover intentions, the direct effects of PTSD, the potentially moderating effects of PTSD and

the potentially mediating effects of PsyCap, separate hierarchical regression analysis was conducted in SPSS v24.

To examine the direct effects of challenge and hindrance stressors and PTSD on job burnout, the direct effects of POS and Security POS, and the potentially moderating effects of POS and Security POS, two hierarchical regression analyses were conducted in SPSS for (1) emotional exhaustion and (2) cynicism.

### **3.8. Ethical considerations**

It was determined that the study should be submitted for a full ethics application. The application was sent to the MUHEC (Northern) who granted approval for the study (see appendix F for the MUHEC letter). Several steps and important issues raised regarding the study are discussed below.

The Committee requested that the researcher attend a meeting to discuss the proposed study on 25 June 2015. The objectives of the research were explained to the Committee who were supportive yet expressed some concern for the well-being of the researcher and the participants. The Committee ruled out the possibility of the researcher going to Pakistan for data collection considering the stress or agony that the questions might cause both the researcher and participants. In addition, the Committee wanted respondent anonymity and confidentiality, and due to the nature of the study, the researcher's assurance that those who had recent terrorism exposure (particularly losses) would not be included to protect participants from added anxiety and trauma. Thus, more clarity around the recruitment of participants was needed. These reservations were clarified by the Committee via email correspondence.

The researcher pointed out to the Ethics Committee that she was already receiving counselling about dealing with "constant exposure to literature regarding terrorism and trauma and with regard to undertaking the study," and that the University had generously granted more free sessions (over the standard 10) to her. For the respondents, a trained psychiatrist had volunteered to assist. The telephone number of the psychiatrist was provided during interviews and in the questionnaires, and participants could call for free sessions and help (see appendix G).

In total, four email interactions took place after the Committee meeting, ensuring that ethical considerations were met. All protocols for the full ethical approach were followed and the Committee approved the application on 18 August 2015. A notification of approval with ethics approval number MUHECN 15\_031 was issued.

### **3.9. Data management**

The data management was undertaken and fulfilled ethical requirements. All interview recordings and transcriptions were stored only on the researcher's laptop. All exchanges with the potential participants of the survey were stored in her supervisor's e-mail box. Anonymous questionnaire responses were securely stored in the researcher's laptop for analysis. The questionnaires that were emailed to employees used a survey tool (Survey Monkey) that maintained respondent anonymity. The consent forms were held by the researcher and her supervisor. Interview data and the anonymous questionnaires data had personal password security. The remaining correspondence and questionnaire data was held by the supervisor.

As the data were collected for this PhD study, following the PhD, it will be destroyed by the supervisor after five years, as discussed and agreed upon with the ethics committee.

### **3.10. Summary**

This chapter opened with the motivation for conducting the research, next it overviewed the research gaps. This was followed by the paradigm choice, which was pragmatism. Next the research design was presented, followed by description and rationale of the three studies. Last the chapter provided the ethical consideration and data management.

Table 3-3 outlines the chapter numbers, titles of journal articles/manuscripts/research papers presented as each chapter, the studies in which these questions were addressed, and the type of analysis used.

**Table 3-3: Summary of chapter number and paper titles, study number, and analysis used in the study**

Chapter No.	Paper Title	Research Questions	Study no. and type	Analysis used	Sample used
4	Job Stressed Employees Living Under Terrorism: Does Positive Organisational Behaviour Provide a Lens for Help (and Hope)?	<p>RQ1: What influence does the terrorism context (around PTSD) have on Pakistani workplaces and their employees?</p> <p>RQ2: What influence do stressors (job stressors and PTSD) have on Pakistani employee outcomes? Is one stressor more dominant? Do job stressors and terrorism stressors (PTSD) interact and have a more detrimental influence on outcomes? RQ4: What role do individual psychological resources play? Are they helpful in dealing with job stressors and PTSD?</p>	None (theoretical paper)	Theoretical paper used literature review, and developed propositions.	NA
5	Working in a Terrorist Region: HR Manager Perceptions	<p>RQ1: What influence does the terrorism context (around PTSD) have on Pakistani workplaces and their employees?</p> <p>RQ2: What influence do stressors (job stressors and PTSD) have on Pakistani employee outcomes? Is one stressor more dominant? Do job stressors and terrorism stressors (PTSD) interact and have a more detrimental influence on outcomes?</p>	Study 1  Qualitative	Thematic analysis, using coding in NVIVO 10	N=15

6	Security-Related Perceived Organisational Support: An Exploration from Pakistani Workplaces	RQ3: What is the nature and role of support for employees working while living under terrorism? Are perceptions of support beneficial? Are there any specific nuances?	Studies 1 and 2	Thematic analysis, using coding in NVIVO 10.	N=15,
7	Job Stress and Post Traumatic Stress Disorder on Job Outcomes: The Mediating Effects of Psychological Capital	RQ4: What role do individual psychological resources play? Are they helpful in dealing with job stressors and PTSD?	Study 3	Correlation and mediation analysis	N=416
8	Challenge-Hindrances stressors and its effect on job burn out in the employees living under on-going terrorism: the moderating role of organisational support	RQ3: What is the nature and role of support for employees working while living under terrorism? Are perceptions of support beneficial? Are there any specific nuances? Does support buffer the influence of stressors on outcomes?	Studies 2 and 3	Correlation and moderation analysis	N=146, N=416

## Thesis by Publication

### Disclosure

Each research paper/journal article/manuscript is stand-alone piece, but these were designed to answer the research questions of this study. The numbering and formatting in the following five chapters, is different from that of the submitted (publication/presentation) versions, this is done to follow the Massey university guidelines for formatting thesis. It also includes spelling difference specially the use of ‘s’ and ‘z’ and ‘ior’ and ‘ior’. The content however has not been changed. Table 3-4 below provides an overview of the five journal articles that are presented in the following chapters, and the ‘journey’ of each manuscript. This table is neither a part of chapter 3, nor 4. However, the table could not have been without a number as per guidelines, therefore it is numbered 3-4.

**Table 3-4: Article Titles and the ‘journey’ of each research paper**

Chapter No- Journal Article Title	Journey of each research paper
<b>4 – Employees Living Under Terrorism: Does Positive Organisational Behaviour Provide a Lens for Help (and Hope)?</b>	An earlier version of this paper was presented in a poster form at the 4th Aotearoa New Zealand Organisational Psychology and Organisational Behaviour Conference in November 2015, at University of Auckland. It was developed further and presented at Australia New Zealand Academy of Management 2015 (interactive session), as well as discussed at the doctoral symposium. Based on the suggestions in the sessions the paper was improved and was published in the <i>New Zealand Journal of Human Resource Management</i> (Special issue) 2015.

<p><b>5 - Journal Article - Working in a Terrorist Region: HR Manager Perceptions</b></p>	<p>An earlier version of this paper was sent to the <i>International Journal of Human Resource Management</i> in January 2016, which was not accepted. The suggestions provided by the reviewers were incorporated. The revised version was sent to <i>Labour and Industry: A journal of the social and economic relations of work</i>; it is currently under review.</p>
<p><b>6 - Journal Article - Security-Related Perceived Organisational Support: An Exploration from Terrorism affected Workplaces</b></p>	<p>An earlier version of this paper was presented at the Australia New Zealand Academy of Management 2016 (competitive session). Currently the paper is under review at the <i>Journal of Vocational Behaviour</i>.</p>
<p><b>7 - Journal Article - Job Stress and Post Traumatic Stress Disorder on Job Outcomes: The Mediating Effects of Psychological Capital</b></p>	<p>An earlier version of this paper was presented at the 5th Aotearoa New Zealand Organisational Psychology and Organisational Behaviour Conference in November 2016, at Auckland University of Technology. It was one of the finalists for 'Professor O'Driscoll Best paper award'. Based on the discussions at the conference, a revised version is currently under review at the <i>International Journal of Human Resource Management</i>.</p>
<p><b>8 - Journal Article - Challenge-Hindrance stressors and its effect on job burn out in the employees living under on-going terrorism: the moderating role of organizational support</b></p>	<p>A complete manuscript ready for submission.</p>

## **Chapter 4**

### **Employees Living Under Terrorism: Does Positive Organisational Behaviour Provide a Lens for Help (and Hope)?**



**MASSEY UNIVERSITY**  
GRADUATE RESEARCH SCHOOL

**Statement of contribution to Doctoral Thesis containing publications**

(To appear at the end of each thesis chapter/section/appendix submitted as an article/paper or collected as an appendix at the end of the thesis)

We, the candidate and the candidate's Principal Supervisor, certify that all co-authors have consented to their work being included in the thesis and they have accepted the candidate's contribution as indicated below in the *Statement of Originality*.

**Name of Candidate: Fatima Junaid**

**Name/Title of Principal Supervisor: Professor Jane Parker**

**Name of Published Research Output and full reference:**

Junaid, F., & Haar, J. M. 2015. Employees Living Under Terrorism: Does Positive Organisational Behaviour Provide a Lens for Help (and Hope)? *New Zealand Journal of Human Resource Management*, 15(2), pp.174-190.

**In which Chapter is the Published Work: 4**

Please indicate either:

- The percentage of the Published Work that was contributed by the candidate: and / or
- Describe the contribution that the candidate has made to the Published Work:

This paper is based on the research model, and is theoretical in nature. It discusses the role Psychological Capital can play in reducing the damaging consequences of Job stress and Post Traumatic Stress Disorder (PTSD). I wrote the first draft of this paper. The first version was presented as a poster with no co-authors, at the 4th Aotearoa New Zealand Organisational Psychology and Organisational Behaviour Conference in November 2015, at University of Auckland. A revised version was presented at ANZAM 2015 which had Jarrod Haar (the then

Principal supervisor) as the co-author. Feedback was provided at conferences and amendments made accordingly. A final draft of this paper was then sent to my PhD supervisor before being sent for publication to New Zealand Journal of Human Resource Management, with Jarrod Haar as the co-author.

*Fatima Junaid*

August 5<sup>th</sup> 2017

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Candidate's Signature

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Date

*Jane Parker*

August 5<sup>th</sup> 2017

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Principal Supervisor's signature

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Date

*Jarrod Haar*

August 5<sup>th</sup> 2017

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Co-author's Signature

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Date

## Chapter 4

### **Employees Living Under Terrorism: Does Positive Organisational Behaviour Provide a Lens for Help (and Hope)?**

**Abstract:** Although terrorism is a growing global concern, organisational science in general, and job stress literature in particular, have missed addressing the important extra-organisational stressor of living under terrorism. To fill the gap, this paper theoretically explores the influence of job stress, and the extra-organisational stressor of living in an area affected by terrorism on employee outcomes. Overall, this paper adds to the literature by incorporating the contextual extra-organisational stressor of living under terrorism and its effects on employee attitudes and behaviours. It makes a number of propositions including: (1) the role that an extra-organisational stressor can play on employee attitudes and behaviours; (2) the potential moderating effects of Psychological Capital in the stressors to outcomes relationships; and (3) urges organisational science researchers to study the implications of living under terrorism, to bring attention to this missing employee voice. Overall, this paper highlights the potential issues for HRM professionals in managing employees working in such complex situations.

**Keywords:** terrorism, job stress, PTSD, Psychological Capital, job attitudes and behaviours

#### **4.1. Background**

The events of 9/11 changed many things around the globe. Researchers have investigated the effects such incidents have on people (Galea et al., 2002; Grieger, Fullerton, & Ursano, 2003; Schuster et al., 2001), and similarly, management researchers have looked at the repercussions on employees (Ryan, West, & Carr, 2003) and organisations (Howie, 2007). For example, there has been research into how survivors of the September 11 Twin Towers attacks coped with returning to work (Ryan et al., 2003), and whether employees were more absent from work (Byron & Peterson, 2002). Further, similar research has been done to strengthen the legitimacy of the findings, thus producing studies on similar incidents such as the London bombings 7/7 (Howie, 2005, 2007). The focus on single terrorism events is understandable; however, there are some terrorism events that are continual and on-going. There is a dearth of organisational science literature addressing the stress of working under terrorism (Bader, Schuster, & Dickmann, 2015).

The first question we ask in this paper is: *What influence does the stressor of terrorism have on employee attitudes and behaviours?*

In the one-off incidents noted above, people in general experience a tremendous loss of psychological resources (Hobfoll, Tracy, & Galea, 2006). However, employee research has shown that those with higher psychological resources, such as hope (Hobfoll, 2001), optimism, and especially resilience (Bonanno, Galea, Bucciarelli, & Vlahov, 2007; Luthans, 2006), are less likely to suffer from traumatic stress, and will recover quicker than those with fewer resources (Luthans, 2006). Because constructs such as Psychological Capital can be developed (Luthans, Youssef-Morgan, & Avolio, 2015), research findings provide insights into how psychological resources might help people traumatised by terrorism. For example, how building self-efficacy can help post-trauma (Luszczynska, Benight, & Cieslak, 2009), or how psychological resources help post-traumatic growth (Hobfoll et al., 2007), or even more broadly, how psychological resources may help in cases of terrorism (Bongar, Brown, Beutler, Breckenridge, & Zimbardo, 2007). Despite this understanding, an important question still remains unanswered: If employees are exposed to on-going, indiscriminate terrorism outside the organisation, will their psychological resources continue to play an important role?

Due to the continuing nature of some terrorism events, there is a constant toll on an individual's psychological resources. Consequently, while Psychological Capital might be helpful in cases of extreme stress and trauma, in cases of on-going terrorism, psychological resources are likely to be depleted (Toker, Laurence, & Fried, 2015). As such, what role might they play for employees in regions affected by terrorism? Furthermore, employees who live under terrorism still have to work in their daily organisational lives, which may still have its own challenges and stressors. For example, employees affected by these terrorism attacks did not have bank mortgages waived in pity or have governments providing food and daily services. Bills must be paid and thus work must be performed. In effect, life must go on, and this is especially true for the major income earner for a household. As such, what is the possible role of Psychological Capital on the relationships between job stress, the stress of living under terrorism, and employee attitudes and behaviours? We postulate that there is the potential for both positive and negative

behaviours in response to stressors, including those related to terrorism. The present paper seeks to explore these factors and propose a number of potential relationships that research might investigate. We first begin by exploring job stress and its related outcomes and then build towards exploring terrorism as a contextual factor in employees' lives.

#### **4.2. Job Stress**

Lazarus (1966) defined stress as “when an individual perceives that the demands of an external situation are beyond his or her perceived ability to cope with them” (p. 16). Lazarus suggested that stress had become so common that it sounded like a cliché. That was almost 50 years ago. Today, the demands of the modern workplace (Houtman & Jettinghoff, 2007; Noe, Clarke, & Klein, 2014) and increasing competition are making workplaces and their employees more and more stressed (Dugan, 2014). Importantly, the World Health Organisation indicates that job stress is a global workforce phenomenon. As such, while stress is a common term that we all understand, it is also a phenomenon that continues to warrant research attention because it has not been remedied.

Leka, Griffiths, and Cox (2003) state that “stress occurs in a wide range of work circumstances but is often made worse when employees feel they have little support from supervisors and colleagues, as well as little control over work processes” (p. 3). A popular stress framework is the demand-resource framework, which highlights two kinds of demands related to work: (1) time-demands, and (2) strain-demands (Bakker & Demerouti, 2007). The time-demands are pressure due to such factors as long hours and overtime, whereas strain-demands are pressure due to work overload and complex tasks (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). For example, someone working a 60-hour week on routine tasks is likely to be tired and exhausted and thus suffer time-demands, while an employee working 40 hours a week on tasks requiring intense concentration and complex thought processes might equally experience stress but owing to strain-demands. Since organisations are becoming increasingly competitive, demand-resource balance (balancing the demands of a job with personal resources) is becoming ever more difficult to attain (Agypt & Rubin, 2012). Additionally, a substantial amount of research exists showing

that job stressors such as role ambiguity, role conflict, and time pressures influence stress levels experienced by employees (Houtman & Jettinghoff, 2007; Sikora, Beaty, & Forward, 2004).

Ultimately, these pressures lead to a failure in the ability of employees to cope (World Health Organisation, 2007), and stress is viewed as a detrimental and destructive workplace factor (Spector, 2002). In response to this coping failure, studies have shown that employees are more likely to engage in counter-productive and detrimental work behaviours (Fox, Spector, & Miles, 2001; Penney & Spector, 2005; Roberts, Scherer, & Bowyer, 2011). In these examples, stressed employees 'lash out' at the organisations providing the pressures by stealing items and undertaking workplace vandalism etc. In addition, stressed employees have increased absences (Arsenault & Dolan, 1983; Bakker, Demerouti, De Boer, & Schaufeli, 2003), either because they cannot handle being back in the workplace where pressure presents, or due to losing the motivation to come to work.

Stress can also influence the organisation through resulting lower productivity and creativity (Byron, Khazanchi, & Nazarian, 2010), and through reduced employee citizenship behaviours (Bolino & Turnley, 2005). In these situations, stressed employees are less helpful and are likely to be less creative and productive. Finally, employees might leave their workplace (Avey, Luthans, & Jensen, 2009; Griffeth, Hom, & Gaertner, 2000; Jamal, 1984; Podsakoff, LePine, & LePine, 2007) to seek alternative workplaces where they believe that they will suffer less pressure and thus stress. Overall, stress is linked with a number of detrimental outcomes including job dissatisfaction (Sullivan & Bhagat, 1992), increased alienation (Fox et al., 2001), reduced commitment (Hollebeek & Haar, 2012), loyalty and engagement (Haar, 2006, Ten Brummelhuis, Haar, Roche, 2014), and poorer well-being (Nixon, Mazzola, Bauer, Krueger, & Spector, 2011; Haar & Roche, 2013). Although it is noted that not all stress is dysfunctional, where demands exceed resources, high levels of stress can become dysfunctional with negative consequences (Hobfoll, 1989), and these negative consequences have a cost to organisations (Beehr & Newman, 1978; Parker & DeCotiis, 1983).

Employees are not only affected by job-related stressors, but also by factors outside the organisation, with Ten Brummelhuis, Haar, and van der Lippe (2010) finding that external factors

can spill over into the working life of the employee. These factors are known as extra-organisational stressors (Baker, 1985). When we consider the context of employees working in countries suffering from terrorist attacks on a regular basis, this context in itself can act as an extra-organisational stressor. The following section seeks to describe the importance of this unique context. This is in response to Johns (2006), who asserted that the influence of context is often unrecognised or underappreciated, and we now explore terrorism in this context.

### **4.3. The Context of Living under Terrorism**

The world has been overwhelmed with the epidemic of terrorism (Cheung, 2014; MacAskill, 2014). On-going indiscriminate terrorism targeting unarmed civilians, is one of the most severe challenges of our times (Canetti-Nisim, Halperin, Sharvit, & Hobfoll, 2009), and yet employee research in the context of terrorism has not been extensive. The severity of terrorism-related stress experienced varies based each individual's contextual appraisal of the situation (Ehlers & Clark, 2000; Park & Folkman, 1997), as does the behavioural response to it (Canetti-Nisim, Halperin, Sharvit, & Hobfoll, 2009). However, if stressful incidents are beyond the range of a person's normal experience, they can overwhelm the coping capability of the individual. Such incidents can cause severe stress reactions and become traumatic events (Bell, 1995). An example of such an event is the September 11 Twin Tower attack in the US (DiGrande, Neria, Brackbill, Pulliam, & Galea, 2011). Miller (2002) states that "essentially, terrorism is a perfect traumatic stressor, because it combines the elements of malevolent intent, actual or threatened extreme harm, and unending fear of future" (p. 296). Terrorism not only leads to loss of lives and injuries, but causes significant, on-going reactions. Living with traumatic events and, more importantly, living in a region targeted by terrorism, can cause extreme stress and anxiety (Shalev & Freedman, 2014). It can also spill over to work (Mankin & Perry, 2004), thus making terrorism an important extra-organisational stressor (Bongar et al., 2007).

Extra-organisational stressors are environmental factors outside work that can lead to negative and potentially damaging reactions in individuals (Matteson & Ivancevich, 1979). The context of on-going terrorism highlights the possibility of the presence of such extreme extra-organisational stress. For instance, Byron and Peterson (2002), in their study of the effects of a

large-scale traumatic event (the September 11 attacks), addressed it as an extreme extra-organisational stressor. However, one that was short-term and not constant. On-going terrorism provides a different context than that of the Twin Towers event, which, while very extreme, was a one-off event. The present paper intends to focus on living with on-going terrorism as an Extreme Extra-Organisational Stressor (EEOS). As an example, an EEOS might be a terrorist attack, not as large as the Twin Towers, but claiming 100 or more lives, occurring monthly or more frequently, year after year, while employees are trying to hold down their jobs.

Thankfully, day-to-day terrorist incidents occur in only a handful of countries. Currently, the five worst terrorism-affected and thus least peaceful countries in the world are: Iraq, Afghanistan, Pakistan, Nigeria and Syria (Institute of Economics and Peace, 2014). People in these countries live under on-going exposure to threats of terrorism, with the loss of family, friends, and property, including workplaces. Additionally, there are the on-going pressures of daily life, of interest in this paper, of having to work to provide an income for oneself and one's family.

Bader et al. (2015) noted the lack of attention paid to the stress of living and working under terrorism within an organisational setting. Outside management sciences the numerous studies on the psychological consequences of terrorism-based trauma have often used post-traumatic stress disorder (PTSD) as a predominant and common psychological consequence (Bleich, Gelkopf, & Solomon, 2003; Canetti-Nisim et al., 2009; Shalev, 1992; Shalev & Freedman, 2014). For example, researchers exploring how New York City survivors of the Twin Towers attack coped after the crisis used a PTSD scale (Galea et al., 2002; Schlenger et al., 2002). However, in the context of the five countries most affected by terrorism, attacks continue to occur weekly, monthly, and yearly, and while it appears to never stop, people are unable to stop their lives. Individuals must continue to work and pay their bills and, as such, this provides a unique context to explore the effects of terrorism on employees. We suggest that PTSD could be used as a tool for exploring the EEOS of living under terrorism. While PTSD can be used as a clinical tool for diagnosing 'severe PTSD', it has also been utilised as a sliding scale to determine levels of PTSD ranging from none/low to high (Canetti-Nisim et al. 2009; Shalev, 1992; Shalev & Freedman, 2014). Thus, PTSD enables researchers to test the stress of living under on-going terrorism along

with workplace stress. We next discuss PTSD and how it shapes the EEOS for the present paper's proposed theoretical model.

#### **4.4. Post-Traumatic Stress Disorder (PTSD)**

Bongar et al. (2007) stated that terrorist attacks are “potentially overwhelming events, survivors of such events are at high risk for Post Trauma Stress Disorder” (p. 140). PTSD is a form of disorder caused by experiencing extreme levels of stress, however, probably having more intense consequences as a form of dysfunctional stress (National Institute of Clinical Excellence, 2005). Continuous and/or frequent exposures to terrorism can lead to higher chances of PTSD (Shalev & Freedman, 2014), and research focused on exposure to acts of terrorism and PTSD is predominately in the following four streams:

1. The causes of post-traumatic stress and disorder (Benight & Bandura, 2004),
2. PTSD prevalence rates (Benight, & Bandura, 2004; also see RAND corporation research publications),
3. Possible treatment/interventions for PTSD (Greenberg, Brooks, & Dunn, 2015), and
4. PTSD in Western countries (Utzon-Frank et al., 2014).

There has been a significant amount of research done on the psychological consequences faced by those identified to be at high risk of being exposed to traumatic stress (Braverman, 1992; Faust & Ven, 2014), in particular, on the armed forces in warfare (Vasterling et al., 2012) and by employees in law enforcement and emergency response (de Boer et al., 2011). However, the typical employee working in an organisation while being exposed to terrorism is a much less researched population (James, 2011a, 2011b). It is important to explore these populations because it has been noted that PTSD is likely to grow in the coming years due to the increasing numbers of terrorism incidents, as well as natural disasters (Iribarren, Prolo, Neagos, & Chiappelli, 2005). Furthermore, while some non-Western countries experience terrorism frequently (e.g., Iraq, Afghanistan, Pakistan, Nigeria, and Syria), they are not the only countries affected. Some Western countries, including USA, United Kingdom and Australia, have faced terrorist attacks, and therefore no country should consider itself immune from such events. In addition, large numbers of people flee countries affected by terrorism due to the hostile and unsafe environments

(Gambino & Jalabi, 2014). They bear the burden of the stress (Jamil et al., 2002) that comes with them to the host organisations and countries. Consequently, we argue that better understanding these employees is important for the global community. In the following paragraphs job stress and employee outcomes are discussed and used to formulate a basis for the discussion of PTSD and its possible relationship with employee outcomes.

#### **4.5. Job Stress, PTSD, and Employee Outcomes**

As noted earlier, job stress leads to negative outcomes including attitudes to the job, behaviours, and well-being. Overall, the stressed employee is likely to view their workplace as a source of the problem (as it provides the pressures) and react with negative job attitudes (less job satisfaction) and negative job behaviours (less helpful and more destructive behaviours), thus experiencing less well-being. These negative consequences also bring a cost to organisations (Beehr & Newman, 1978; Parker & DeCotiis, 1983) through reduced productivity and engagement, higher employee absence, replacement costs from turnover, and higher sickness costs due to poorer physical health. Despite the ample literature on job stress and its influences on employee outcomes (Ford, Heinen, & Langkamer, 2007), there is scant research available on traumatic stressors and employee outcomes. Experiencing EEOS due to terrorism can be assessed using PTSD, which is likely to have similar but probably more intense consequences compared to those of dysfunctional stress (National Institute of Clinical Excellence, 2005). There is evidence that PTSD can lead to detrimental outcomes, however, these outcomes have not been measured in conventional organisational settings (McFarlane, Williamson, & Barton, 2009). While there is existing research showing the links between job stress and outcomes such as in-role performance (Jamal, 1984), organisational citizenship behaviours (Bolino & Turnley, 2005), deviant work behaviours (Fox, Spector, Goh, Bruursema, & Kessler, 2012), and job satisfaction (Ford, Heinen, & Langkamer, 2007); the relationship of PTSD with these outcomes is yet to be researched. As such, it is timely to postulate the potential relationships of PTSD due to terrorism on employee attitudes and behaviours. The next section provides some brief outlines on the outcomes that we suggest can be explored in relation to employee outcomes from job stress and PTSD due to terrorism.

#### *4.5.1. Satisfaction Outcomes*

Shin and Johnson (1978) define life satisfaction as "a global assessment of a person's quality of life according to his chosen criteria" (p. 478). Others view it as a global cognitive judgment of one's life (Suh, Diener, Oishi, & Triandis, 1998). Importantly, in the context of this paper, life satisfaction can be affected by work and non-work factors (Demerouti, Bakker, Nachreiner, & Schaufeli, 2000; Near, Smith, Rice, & Hunt, 1984). Thus, job stress and EEOS can adversely influence life satisfaction. Frey, Luechinger, and Stutzer (2007) stated that "it stands to reason that people living in a country rife with terrorism are less happy than those living under more orderly political conditions" (p. 22). We know that when people are exposed to trauma it can lead to stress and PTSD (Besser & Neria, 2009) and that this can have adverse effects on life satisfaction (Karatzias et al., 2013). This has been supported in the case of war veterans (Schnurr, Hayes, Lunney, McFall, & Uddo, 2006) and of civilians living under long-term trauma (Besser & Neria, 2009). Thus, stress due to jobs and the terrorism environment (EEOS) are likely to adversely influence life satisfaction.

Job satisfaction has been defined as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p. 1304), however, with the current dynamics of the market, roles are no longer clearly defined (Nelson & Burke, 2000; Tubre & Collins, 2000). Time is always short (DeFrank & Ivancevich, 1998), and globalisation makes the day longer (Fagan, Lyonette, Smith, & Saldaña-Tejeda, 2012). Combined, these factors make employees more susceptible to dysfunctional stress (Fagan et al., 2012). Moreover, there are many job-related factors that cause job stress (Jamal, 1990), which in turn can adversely affect job satisfaction (Fairbrother & Warn, 2003; Landsbergis, 1988). In addition to the negative links between job stress and job satisfaction, PTSD has also been found to reduce job satisfaction (Mealer, Shelton, Berg, Rothbaum, & Moss, 2007; North et al., 2002; Schnurr et al., 2006; Skogstad et al., 2013). Thus, employees who live under on-going terrorism (EEOS) are likely to be suffering additionally from the pressure of constant fear. Like chronic stress, employees might not always be aware of these pressures. Employees who perceive these pressures as high from

both job stress and PTSD are likely to report lower levels of satisfaction with their job and life. This leads to our first set of propositions.

*Proposition 1: Job stress will be negatively related to job and life satisfaction.*

*Proposition 2: PTSD will be negatively related to job and life satisfaction.*

#### **4.5.2. Behavioural Outcomes**

We also propose that stress and PTSD will influence the behaviour of employees living under stress from the workplace and terrorism. This is because when employees feel stressed they can respond by engaging in deviant behaviours (Penney & Spector, 2005; Robinson & Bennett, 1995). Deviant work behaviour (DWB) is defined as the “voluntary behavior of organizational members that violates significant organizational norms and in so doing threatens the well-being of an organization, its members or both” (Robinson & Bennett, 1995, p. 556), such as theft or vandalism (Fox, Spector, & Miles, 2001; Penney & Spector, 2005; Roberts, Scherer, & Bowyer, 2011). For example, an employee might strike out at a piece of workplace machinery as a way to express their frustration at their workload. Another employee might decide that their level of compensation is not adequate to the stress the job places upon them, leading them to steal from their employer. Based on the stress-strain coping concept (Lazarus & Folkman, 1984), the conservation of resources theory (Hobfoll, 1989), and borrowing from disaster literature (Peek & Sutton, 2003); in the case of traumatic events, employees would be strained and feel a loss of resources (Toker et al., 2015).

Strain and loss of resource can lead to a voluntary stress response in the form of deviant behaviour (Agnew, 1992). For instance, if while coming to work an employee sees a bombed site where bodies are being examined by crowds gathering to find/identify their loved ones, it may be upsetting, and that may reflect in their behaviour at work. This might materialise as act of vandalism at the workplace – kicking in a door or throwing a stapler through a glass window. Perhaps the employee sees these acts as simply a reflection of the on-going destruction they see all around them? Stress spillover literature shows that stresses can spill over from one domain, such as non-work, to another domain, such as work (Westman, 2001). Thus, an employee living under the stress of on-going terrorism may come to work and abuse colleagues and their

organisation as a reaction to the detrimental things they see outside the workplace. Stressed employees may also give up, and thus have attendance issues such as increased absences (Arsenault & Dolan, 1983; Bakker, Demerouti, De Boer, & Schaufeli, 2003). We further propose that these stresses may also have a positive influence on behaviours.

Based on social support theory (Flannery Jr, 1990; Hobfoll, 1989), in cases of trauma when people help and support others (such as a friend or neighbour) it can help them in reconciling with their own loss (Brown, Brown, House, & Smith, 2008). Therefore, potentially in cases of exposure to terrorism, employees may become helpful to each other, in order to share the pain of the experience. Thus, employees may help each other in workplace activities as it provides a mechanism for them to overcome their otherwise lack of coping. Such workplace behaviours are called organisational citizenship behaviour (OCB), and are defined as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system and that in the aggregate promotes the effective functioning of the organization” (Organ, 1988, p. 4). OCBs are a form of extra-role behaviours that are not written into an employee’s employment contract, such as saying positive things about the company or supporting a colleague in their job role. In the EEOS context, OCBs are interesting because research has shown that highly stressed employees typically engage in fewer OCBs (Motowidlo, Packard, & Manning, 1986; Organ, 1988). This is because employees stressed out by their job feel they have less energy to enable them to engage in OCB. Paradoxically, Johnson et al. (2007) found that in the case of trauma, there is a possibility that people might find their resolve in helping others. Thus, under PTSD we might expect there to be more OCBs rather than fewer.

Thus, employees can have positive or negative voluntary behaviours that help them deal with a stressful situation. There is also research suggesting that both these behaviours (OCBs and DWBs) can co-exist (Spector & Fox, 2010). Hence, an employee can help their co-worker while also vandalising their workplace. What is not known is how the EEOS of living under terrorism and job stress might influence DWBs and OCBs. Being overwhelmed by job stress and PTSD, one might feel sympathy for peers and want to help colleagues, however vent one’s frustration on the organisation. As such, we propose two alternative hypotheses regarding OCBs. In the first

alternative, more stress simply leads to more extra-role behaviours, and thus we suggest the potential for beneficial influences from both job stress and PTSD. In the second alternative, and aligned more with the focus of Johnson et al. (2007), we suggest that only the stress from PTSD will be beneficial, while job stress will continue to be detrimental. This leads to the next set of propositions.

*Proposition 3: Job stress and PTSD will be negatively related to OCBs and positively related to DWB.*

*Hypothesis 3a: Alternatively, job stress and PTSD will be positively related to OCBs and positively related to DWB.*

*Hypothesis 3b: Alternatively, job stress will be negatively related to OCBs and positively related to DWB, while PTSD will be positively related to OCBs and positively related to DWB.*

#### **4.6. Positive Organisational Behaviour (POB)**

Having proposed the relationships of job stress and PTSD with employee outcomes, the paper now explores the potential for POB towards these relationships. In particular, we examine the role of positive Psychological Capital and suggest that this may play a significant role; where the individual employee can use Psychological Capital (PsyCap) as an individual psychological resource to better manage the detrimental effects of stress and PTSD. We understand that within those countries consistently hit by terrorists paid employment continues. How? We suggest that, almost at a societal level, these employees must be drawing on their PsyCap as a resource to enable them to keep working under such trying conditions. We address this specific type of POB next.

#### **4.7. Psychological Capital**

A popular framework of psychological resources by Luthans and colleagues (Avey, Luthans, Smith, & Palmer, 2010; Luthans, Avey, Avolio, Norman, & Combs, 2006) is PsyCap, which is an important tenet of POB. It is a personal resource that can help employees to deal with the everyday stress of work life positively and be productive while contributing to the well-being of the employee (Luthans et al., 2015). PsyCap is defined as “an individual’s positive

psychological state of development” (Luthans, Youssef, & Avolio, 2007, p. 3) and is characterised by four dimensions:

1. **Hope** consists of both willpower (individuals’ agency, or determination to achieve their goals) and “waypower” thinking (being able to devise alternative pathways and contingency plans to achieve a goal in the face of obstacles).
2. **Efficacy** is defined as an individual’s conviction about his or her abilities to mobilize the motivation, cognitive resources, and courses of action necessary to successfully execute a specific task within a given context.
3. **Resilience**, the developable capacity to rebound or bounce back from adversity, conflict, failure, or even positive events, progress, and increased responsibility.
4. **Optimism** is when (one) attributes positive events to personal, permanent, and pervasive causes, and negative events to external, temporary and situation specific ones (Luthans et al., 2015).

Luthans, Avolio, Avey, and Norman (2007) stated that “employees who are more hopeful, optimistic, efficacious, and resilient may be more likely to ‘weather the storm’ of the type of dynamic, global environmental contexts confronting most organizations today better than their counterparts with lower PsyCap” (p. 568). Further, they suggest that PsyCap can be built and enhanced by the employee as well as by the organisation, and benefits both the individual and the organisation (Avey et al., 2009). According to the meta-analysis (Avey, Reichard, Luthans, & Mhatre, 2011) the utility of PsyCap is gaining strength swiftly. To understand the potential moderating role of PsyCap, we firstly discuss the relationship of PsyCap with job stress and explore the possible relationship with PTSD and the extreme stress of living under terrorism. We then discuss the ways PsyCap can be the HERO (Hope, Efficacy, Resilience and Optimism) in moderating the relationship between job stress and PTSD (due to the EEOS of terrorism) towards employee outcomes.

#### ***4.7.1. PsyCap as a Moderator***

An individual’s PsyCap is likely to influence the extent to which they experience stress and how it further influences their behaviours (Avey et al., 2009). While there is support (including

meta-analytic) for PsyCap being negatively related to stress and other detrimental health outcomes (Avey et al., 2011; Roche, Haar, & Luthans, 2014), these have not been tested in the terrorist-prone countries noted above. Similarly, PsyCap has not been studied in conjunction with terrorism and PTSD, especially in an organisational context. However, PsyCap is known to aid overall mental health (Krasikova, Lester, & Harms, 2015; Roche et al., 2014) and to help in cases of trauma due to bullying (Laschinger & Nosko, 2015). Furthermore, various studies have shown how each of the four dimensions within PsyCap (studied separately) can influence PTSD. For instance, highly resilient employees are likely to better deal with trauma as compared to those with low resilience (Bongar et al., 2007; Hobfoll et al., 2012), and a similar effect has been shown for hope (Ai, Cascio, Santangelo, & Evans-Campbell, 2005), optimism (Ai, Evans-Campbell, Santangelo, & Cascio, 2006), and coping self-efficacy (Benight & Bandura, 2004). Luthans and colleagues (Avey et al., 2009; Avey, et al., 2010; Luthans, Vogelgesang, & Lester, 2006) are of the view that the core construct of PsyCap can provide better understanding and aid in dealing with stress, rather than each individual factor. Therefore, collectively the four dimensions may influence the nature of PTSD, and hence employees exposed to terrorism may benefit by having high PsyCap.

PsyCap aids employees to appraise stress positively, which ultimately leads to positive outcomes (Luthans & Youssef, 2007; Youssef & Luthans, 2007). Research has shown that PsyCap has a positive relationship with non-work-related outcomes, including life satisfaction (Culbertson, Fullagar, & Mills, 2010) and psychological well-being (Avey et al., 2011); and with work-related outcomes such as performance, higher job satisfaction (Luthans, et al., 2007), organisational citizenship behaviours (Avey, Luthans, Youssef, 2010), and organisational commitment (Avey et al., 2011). PsyCap has also been found to have a negative relationship with cynicism, turnover intentions, and deviant behaviours (Avey, Luthans, & Youssef, 2010). Avey, Wernsing, and Luthans (2008) found support for PsyCap interacting with another psychological variable, and similarly this paper suggests that PsyCap might interact with (1) job stress and (2) PTSD to minimise the harmfulness of these stressors. As such, while employees experiencing job stress and PTSD might report detrimental attitudes, behaviours, and well-being outcomes, those

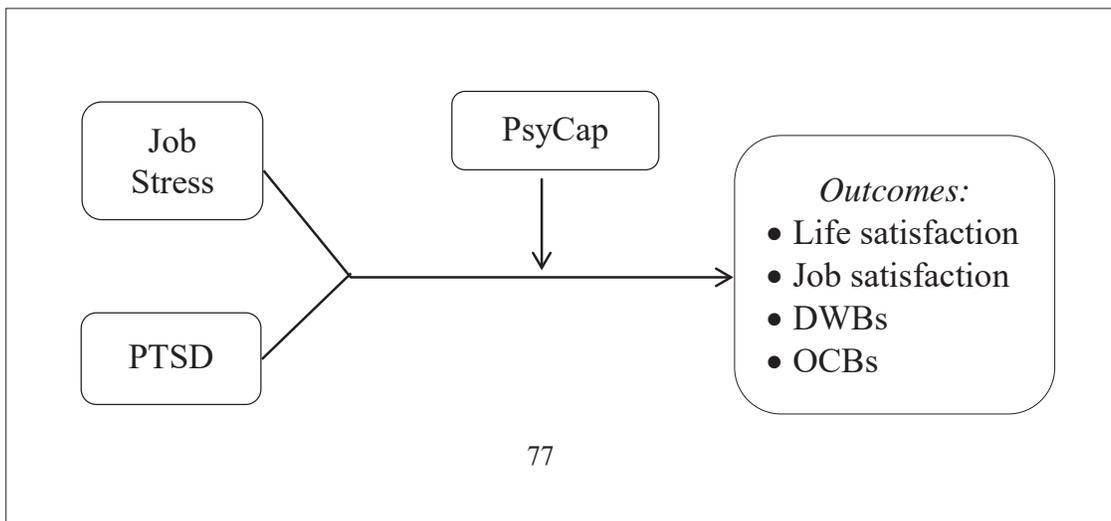
with higher PsyCap might be able to minimise these effects. Thus, the positive nature of PsyCap might minimise the detrimental effects of stress and PTSD through recasting the situation positively, and learning skills and techniques to stay resilient in the face of these factors. Consequently, we propose that PsyCap might play a moderating role in the detrimental influence that job stress and PTSD will have on attitudes and behaviours. We argue that employees in the countries affected by terrorism who have higher PsyCap will be able to minimise the detrimental effects of both job stress and PTSD. While psychological resources might deplete in a challenging setting like on-going terrorism, the very nature of PsyCap having resilience suggests that individuals high in PsyCap are less likely to be depleted and thus are more likely to maintain their psychological resources and ultimately prevail in high-EEOS situations. Consequently, employees who experience hope and resilience in times of adversity, high self-efficacy to deal with these situations, and optimism to carry on, might lead to better satisfaction and more positive behaviours. This leads to our last set of propositions.

*Proposition 4: PsyCap will moderate the detrimental effects of job stress and PTSD towards (a) job satisfaction and (b) life satisfaction. Employees with high PsyCap will report higher satisfaction at high levels of job stress and PTSD compared to those employees with low PsyCap.*

*Proposition 5: PsyCap will moderate the detrimental effects of job stress and PTSD towards (a) OCBs and (b) DWBs. Employees with high PsyCap will report better behaviours at high levels of job stress and PTSD compared to those employees with low PsyCap.*

We summarise our proposed relationships in the following model (Figure 4-1).

**Figure 4-1 Proposed Model for Job stress, PTSD, PsyCap and employee outcomes**



#### **4.8. Discussion**

In this paper we have highlighted the presence of a salient context that may be affecting employees living under terrorism, which is a source of extreme extra-organisational stress. Our aim was to bring to the attention of organisational science researchers that POB and particularly PsyCap might be helpful in buffering the detrimental effects of both living under the extreme stress of on-going terrorism and working with everyday job stress. We built on earlier research using PTSD as a psychological consequence of terrorism and used it as a lens to better understand the extreme stress of living under terrorism. The five countries worst affected by terrorism were presented as a context where these phenomena can be studied. Because there is very little research available with respect to job stress and PTSD, we focused upon only the four outcomes that were discussed. Finally, we used PsyCap as a resource that might help employees in those trying circumstances.

Considering that terrorism has grown like an epidemic and the numbers of people affected are increasing every day, it has been remiss of organisational science researchers to not pay enough attention to this context (Bader et al., 2015). We suggest that it remiss for positive organisational psychologists not to have realised the opportunity to use POB and specifically PsyCap as a resource to better understand and help terrorism-afflicted and stress-stricken employees. Addressing the gap in the literature, this paper proposes that living under on-going terrorism can lead to extreme stress, which can become an extra-organisational stressor, and, coupled with job stress, may cause unfavourable consequences. But all may not be lost, and PsyCap could become a HERO in rescuing employees, at least partially, from the adverse effects of stressors.

#### **4.9. Implications**

While the current paper proposed PsyCap as a moderator of the relationships between stress and PTSD towards employee outcomes, there may be other ways that POB and PsyCap might operate. Perhaps PsyCap acts as a mediator and takes the detrimental influence of stress and PTSD but still manages to positively shape employee well-being, attitudes, and behaviours? Perhaps PsyCap has a more rudimentary and antecedent role, where those high in PsyCap are better able

to minimise and reduce stress perceptions and PTSD and thus its influence might potentially operate somewhere other than as a moderator? In addition, other POB constructs such as gratitude might play a significant role? Overall, we offer the present paper as a proposition for what is unknown but could potentially become known by exploring these relationships in depth in one (or more) of the five countries in the world most affected by terrorism. We encourage researchers to explore the role of PTSD amongst employees in the workplaces of these EEOS settings to test the relationships proposed here.

The implications for HRM professionals are that these EEOS situations provide a challenging context but also potential opportunity for HR to provide assistance. As such, constructs like PsyCap that are developmental (Luthans et al., 2015); provide important training opportunities for enhancing these psychological resources. Employees dealing with job stress and never-ending EEOS are living under conditions that the majority of us, thankfully, will never have to face. In this regard, conducting such research may also provide a voice for these employees and we may find, as we propose, that there is a stronger HERO within most of them, which allows these employees to get up and go to work and try to shut out the potential terrorist act for the next hour, day, week, or month.

#### **4.10. Conclusion**

It is worth highlighting that conducting an empirical study in areas that are marked as the most dangerous places on the globe is logistically a difficult task, not just in the collection of data but also in the ethical issues involved regarding the extreme stress of terrorism and PTSD. Due diligence and care will be needed to ensure that, by asking difficult questions, we do not add to the suffering of those who are already in pain. Acknowledging these challenges, we also acknowledge that in the years to come, terrorism and the stress of living under terrorism are likely to have wider implications, not only for individuals but also for organisations. Overwhelmed by stress, employees may show aggression and deviant behaviours, or they may develop low productivity and high job dissatisfaction, none of which are beneficial for the organisation. As stated earlier, a large number of people are migrating or seeking refuge from countries affected by terrorism due to hostile and unsafe environments (Gambino, 2014). They bear the burden of

the stress (Jamil, 2002) that comes with them to the host organisations and countries. Therefore, it is timely and vigilant to focus research in this area, and in particular, to address these issues in management and organisational studies.

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## **Chapter 5**

### **Working in a Terrorist Region: HR Manager Perceptions**



**MASSEY UNIVERSITY**  
GRADUATE RESEARCH SCHOOL

**Statement of contribution to Doctoral Thesis containing publications**

(To appear at the end of each thesis chapter/section/appendix submitted as an article/paper or collected as an appendix at the end of the thesis)

We, the candidate and the candidate's Principal Supervisor, certify that all co-authors have consented to their work being included in the thesis and they have accepted the candidate's contribution as indicated below in the *Statement of Originality*.

**Name of Candidate: Fatima Junaid**

**Name/Title of Principal Supervisor: Professor Jane Parker**

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Please indicate either:

- The percentage of the Published Work that was contributed by the candidate: and / or
- Describe the contribution that the candidate has made to the Published Work:

I wrote the first draft of this paper after conducting interviews. I had personally conducted, transcribed and analysed the interviews. It based on the interplay of job and terrorism stress, and explores the stressors possible consequences. I sent an earlier version of this paper to International

Journal of Human Resource Management in early 2016. It was not accepted. I used the feedback to improve the paper and then sent it to my Principal supervisor. Using her guidance, I developed the paper, and sent to *Labour and Industry* in June 2017, and it is currently under review.

***Fatima Junaid***

August 5<sup>th</sup> 2017

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Candidate's Signature

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Date

***Jane Parker***

August 5<sup>th</sup> 2017

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Principal Supervisor's signature

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Date

## Chapter 5

### Working in a Terrorist Region: HR Manager Perceptions

#### 5.1 Introduction

The world has been overrun by a terrorism epidemic (Cheung, 2014). Countries known to be hosts for terrorism are likely to be the worst affected, with terrorist acts part of everyday life for over a decade (e.g. as in Iraq, Syria, Pakistan, Nigeria and Afghanistan - Institute for Economics and Peace, 2015). Alongside the stress of living under on-going terrorism, people in these countries need to earn a living in order to support themselves and their families. However, little is known about how they function in such hostile environments or of how terrorism-related stressors impact these workers and workplaces. Researchers have explored the effects that terrorist incidents have on people (Galea et al., 2002; Schuster et al., 2001), and their repercussions on employees (Ryan, West, & Carr, 2003) and organisations (Howie, 2007). However, these studies have some limitations. First, they focus on one-time terrorism incidents such as the London bombings or 9/11 (Ai, Cascio, Santangelo, & Evans-Campbell, 2005; Galea et al., 2002; Howie, 2007), with Ryan et al. (2003) and Byron & Peterson (2002) examining the events of 9/11 in relation to employees' ability to return to work and absenteeism respectively. Studies of stress conducted in countries which are affected by terrorism such as Pakistan have focused on job stress alone (Abbas & Raja, 2011).

Bader and colleagues (Bader, Reade, & Froese, 2016; Bader & Berg, 2014; Bader & Schuster, 2015) have researched expatriates working in terrorism-afflicted countries (including Pakistan) but only focused on expatriates and not local workers. They acknowledge that expatriates often have privileges such as personal security and options to leave while locals do not typically have those options available to them.

Research on on-going terrorism and the workplace is sparse and mostly focuses on Israel (Besser & Neria, 2009; Bleich, Gelkopf, & Solomon, 2003) which differs from other countries due to its geopolitical conflict with Palestine – with sides fighting for a purpose and identity. Thus, little is known regarding the influence of on-going terrorism on employees in countries (besides Israel) which suffer from on-going terrorism. Beyond the organisation science literature,

scholars have examined the stress of terrorism and trauma in been the fields of trauma (Tracy, & Galea, 2006), mental health (Wessely, 2005) and disaster and conflict management (Canetti-Nisim, Halperin, Sharvit, & Hobfoll, 2009) but to a much lesser extent on employees (Bader & Schuster, 2015). Consequently, calls have been made to study the implications of living under hostile environments for the workplace (Bader & Schuster, 2015).

In response, this study explores the effects of living under on-going terrorism on employees behaviour. We build on Conservation of Resources (CoR) theory (Hobfoll, 1989), arguing that on-going terrorism takes a toll on employees' resources, which in turn can affect how employees feel at work. Byron and Peterson (2002) studied terrorism as an extreme extra-organisational stressor and Junaid and Haar (2016) proposed that on-going terrorism should be explored within a workplace setting as an extreme stressor. Thus, we develop our research questions to understand how stress due to on-going terrorism may impact on employees at work.

## **5.2 Literature Review**

CoR theory suggests that strain occurs when resources are threatened or lost (Hobfoll, 1989), with resources being those features valued by an individual, including conditions (e.g. external environment), objects (e.g. tools) and energies (e.g. money). Fundamentally, CoR theory suggests that conditions shaped by terrorism drain employee resources (e.g. energy) and are detrimental to outcomes, for instance, higher job burnout (Alacorn, 2011). Our premise is that employees living under ongoing terrorism may suffer losses from resources – personal, physical, psychological, economical and/or social. Examples include losing a family member, colleague, suffering property damage, feeling worried, scared or sad, losing a job due to a business closure for security reasons, or being unable to go to social places due to the lack of security. Such resource loss will have detrimental effects, especially in the context of this study where it has been ongoing.

The demands of the modern workplace are stressful (Noe, Clarke, & Klein, 2014) and this is a global phenomenon (World Health Organisation, 2003). Employee stressors include work overload, time pressures, competition, downsizing, and reduced budgets (Leka, Griffiths, & Cox, 2003). Furthermore, Alarcon (2011) stated: “the fewer resources an individual has at his or her

disposal and the higher the demands placed on the individual, the more maladaptive coping will be performed” (p. 550). Overall, CoR theory suggests that the experience of resource loss due to an employee’s environment (terrorism) and/or job will detrimentally influence his or her behaviour. This fits the context of this study where we explore both job and terrorism stressors.

### **5.3 Research Context**

On-going, indiscriminate terrorism towards civilians is one of the biggest challenges of our times (Canetti-Nisim et al., 2009). Yet, research on employees in the context of terrorism is limited. Terrorism not only leads to loss of life and injuries; it can overwhelm an individual’s coping capacity and cause severe stress reactions – becoming a traumatic event (Bell, 1995). As Miller (2002) notes, “terrorism is a perfect traumatic stressor, because it combines the elements of malevolent intent, actual or threatened extreme harm, and unending fear of future” (p. 296). Living with traumatic events, specifically terrorism, can cause extreme stress and anxiety (Shalev & Freedman, 2014) and post-traumatic stress disorder (PTSD) (Besser & Neria, 2009). The severity of terrorism-related stress varies according to each individual’s appraisal of the situation (Park & Folkman, 1997), and thus his or her behavioral response to it (Canetti-Nisim et al., 2009). It can also spill over to work (Mankin & Perry, 2004), marking out terrorism as a key stressor (Bongar, Brown, Beutler, Breckenridge, & Zimbardo, 2007).

Environmental factors (in this case, terrorism) that can lead to negative and damaging employee reactions are categorised as extra-organisational stressors (EOS) (Matteson & Ivancevich, 1979), and this terminology has been accepted in the terrorism literature (e.g., Byron & Peterson, 2002). On-going terrorism provides a different context than single terrorist attacks as it is continuous, with death tolls of between 10 and a 100 people per month, with any organisation, school, religious or crowded place targeted. This continuous exposure and threat can be exhausting for employees and have detrimental consequences.

#### *Pakistan*

Our research setting is Pakistan, a country stricken with terrorism, with an average death toll of 2,000 every year for the last decade (United Nations, 2012). Yet, organisations in Pakistan resemble organisations elsewhere: there are multi-national corporations, as well as national and

international product chains. Similarly, both local and international, NGOs, manufacturers and retailers exist.

As elsewhere countries, these organisations have performance expectations and targets (Fazl-e-Haider, 2016). Likewise, jobs demands are a cause of job stress (Gilboa, Shirom, Fried, & Cooper, 2008). Employees have to live with constant threat of terrorism, along with ‘conventional’ job pressures (Khalid, 2015). This can detrimentally influence their behavior, with Junaid and Haar (2016) proposing that, while terrorism-related stressors might be generally detrimental to outcomes, in times of need, employees may become more helpful to one other. Based on CoR, we can assume that this may happen as a coping mechanism. We thus explore whether stressors are universally detrimental, and raise some important research questions, including: do terrorism stressors enter the workplace and have a detrimental influence on employee? While we are predominantly interested in terrorism stressors, we also include job stressors to ensure that an accurate picture of employee pressures is captured. From an HRM perspective, we seek to understand how terrorism stress and job stress might relate, and influence employee behaviour. Thus, we explore the following questions.

- 1. What is the nature of terrorism stressors in Pakistan workplaces?;*
- 2. How do the terrorism stressors relate with work and specifically job stressors?; and*
- 3. How do terrorism stressors influence employees? Are they universally detrimental?*

#### **5.4 Methods**

Research was conducted in the Khyber PakhtunKhwa (KPK) and Federally Administrated Tribal Belt (FATA) of Pakistan, the worst affected areas of the country (Institute for Economics and Peace, 2015). Semi-structured interviews were undertaken with 15 HR and line managers who were selected via the first author’s personal networks, Table 5-1 shows the interviewee’s age, gender, and organisation type and size.

Considering the sensitive and stressful nature of living under ongoing terrorism, we chose to interview HR and line managers in the belief that it would be easier for them to talk about their employees rather than themselves. We believe that the distal nature of the questions (about others and not the self) would also be less threatening and encourage greater clarity of information. Our

focus was the influence of stressors on employee behaviour in workplace; thus, managers were suitable as it was considered that they might have clearer insights into behaviours and able to give responses about multiple employees. The study did not seek to achieve generalisability but, rather, to gather perceptions from informants who are aware of the circumstances and can comment on the extra-organisational and organisational stressors and their implications for worker behaviour. On study ethical considerations, we followed NATO (2008) guidelines for ‘managing psychosocial services for people involved in major incidents’ including terrorism. We excluded respondents who had experienced direct loss of life or severe exposure so that they would not overlay their own experiences. Notwithstanding this, all of the respondents noted that they were aware of acts of terrorism in their daily lives.

**Table 5-1: Interviewees' firm size, Organisation type, age and gender.**

Manager No.	Firm Size	Organisational Type	Age	Gender
1	450	Energy service provider*	28	Male
2	185	Non-profit organisation*	29	Male
3	95	Local Bank*	34	Male
4	1,000	Cigarette company*	33	Male
5	2,200	Service organisation*	29	Female
6	60	Mobile service provider*	50	Male
7	65	Project based company*	34	Male
8	12	MNC Bank*	33	Male
9	100	School Chain*	45	Female
10	13	International non-profit organisation	34	Male
11	47	Home delivery service*	27	Male
12	600	Multinational Company: Fast moving consumer goods (MNC FMCG)	46	Male
13	125	Furniture manufacturing*	65	Female
14	250	Large firm*	55	Male
15	40	Not disclosed	33	Male

**Summary Statistics:**

\* Private sector

Respondents were typically male (12/15)

Respondents were typically married (11/15)

Respondents were aged between 28-65 years.

**All identified as Muslims except for one Christian.**

Interviews were conducted from September to October 2015 via telephone and Skype. Most interviews lasted 45-60 minutes, and were recorded (with permission) and transcribed. Respondents were asked these broad questions: (1) to what extent are employees in your organisation under stress and why? and (2) how did the stressors influence employee behaviour? Interviewees were asked to share incidents or anecdotes, and probed for further detail.

**Sampling and analysis**

Personal contacts were used to contact interviewees for three reasons. First, as mentioned, an important ethical requirement was that 'direct victims of terrorism' should not be part of the sample. Second, sampling needed to be undertaken in such a way that the well-being of the researcher and interviewees were assured. Last, the nature of the topic meant that the smallest number of respondents needed should be involved; the researcher interviewed a total of 15

managers to ensure response saturation (O'Reilly & Parker, 2012). Initially, four interviews were conducted, coded and themes were developed, followed by the next five interviews. These were then coded to see if new themes emerged. Some sub-themes emerged, but no new themes emerged. The last six interviews were carried out to ensure that all themes had been surfaced. Responses were coded using NVIVO 10. Narrow codes were first manually developed; some were later merged into parent 'nodes'. An independent management researcher randomly coded five interview transcripts to check coding validity. Overall, strong similarity between codes was found, and from these, themes were developed.

## **5.5 Results**

The two broad questions surfaced three themes. Fourteen of the 15 respondents discussed two main factors which became our first two themes: (1) stress from terrorism and (2) job stress. While our principal focus was stress from terrorism, we were also interested in how job stress interacts and is additive to terrorism stress. A third theme emerged, concerning employee behaviour relating to themes 1 and 2.

### **Theme 1: Terrorism Stressors**

Twelve managers expressed that some, if not all, of their employees are affected and traumatized directly and indirectly by terrorism, and thus terrorism was a cause of stress. For example: *"As you know, we are living under terrorism in KPK that is such a stress for everyone."* (male 50, married, manager: private mobile service provider)

It emerged that the stress of terrorism was based on: (1) *direct exposure* where the employee was a target, experienced direct loss of life (a family member or co-worker) and/or (an) attack(s) at work; and (2) *indirect exposure* where they noted that their employees passed terrorist sites, had seen mutilated and/or dead bodies, heard blast and gunshots, seen and/or helped emergencies services on the affected sites, felt scared in a crowded place or traffic jam, or worried about the safety of their children attending educational institutions and for their family. One specific example of indirect exposure related to an attack in December 2014 on the Army Public School (APS) where 145 children were killed and those who survived witnessed the attack, including the burning alive a teacher and the death of the school principal. All of the interviewees,

including those who had earlier stated that their employees were not under stress of terrorism, mentioned that incident as one which affected employees for days. The APS incident even affected those who lived in other cities who did not experience immediate loss. It showed that, even without direct exposure, some terrorist attacks have the power to impact on all employees, even those who are not located in the attacked city. For instance, *“On that particular day, we were watching the news on network, for everybody the level of stress and sadness were just out of this world. Of course, our colleagues were so stressed on that day they were unable to work.”* (male, 34, married, International non-profit organisation)

Overall, five managers thought that the stress of terrorism had a greater effect than job stressors on employees. One from a project-based company (male, 34, married) commented: *“(w)orking in difficult areas where there are security threats, I think the security threats are much bigger source of threat ... Priority-wise, threats would be first and workload would be second or third.”* Another manager from a private non-profit organisation, (male, 29, unmarried) stated, *“... because job stress is not such a big problem; one can manage by extra effort and hours, but terrorism no matter what they (employees) do, it is not in their hands. They can’t cope with its stress. They have to live with it.”*

Within this theme, the analysis identified four prominent sub-themes: loss, fear, trauma and risk to life. A fifth sub-theme relates to habituation/resilience towards terrorism.

### ***Loss***

The majority of respondents (11) were aware that employees at their organisation had experienced loss of life due to terrorism, and nine stated that employees had suffered from trauma due to terrorism. The prevalence and the dreadfulness of terrorism were clearly reflected:

*Many employees have had losses because of terrorism. Again, given something that has become part of everybody's life, I do not think there is any house which has not experienced loss, somebody they know, or related to somehow. Every person I know directly or indirectly has faced this ...* (male, 33, married)

One manager from a multinational company (male, 46, married, MNC: FMCG) noted, *“We had a distributor in Tank (a small town in KPK), his vehicle was blown up by a mortar. The*

*last shot (from the mortar) went into the back of truck and blew it up. Stuff like that happened and led to stress.*” Manager from a private service organisation (female, 29, unmarried) paused while explaining loss: *“Another incident was right next to us. It is the adjacent imambara (mosque) to our building. A blast happened over there and we lost two of our colleagues.”* Finally, a local bank manager (male, 34, married) explained loss and its effects:

*At times, our employees are directly affected by terrorism, like a blast right next door.*

*The building standing next to us was no more there. There were no casualties (in our office). It affected our building, but more than the building, it affected the mind and the mindset; that this place is not safe.*

### ***Fear***

Managers expressed that fear is ever-present, using phrases such as *“fear of not knowing what might happen”*, *“fear is something that you cannot get used to”*, *“there is that danger hovering above us all the time”* and *“you are scared for your family and children”*. Another example included: *“fear comes with seeing so much of military, weapons, and check posts every day.”* Most managers held the view that such incidents are not easily forgotten:

*Employees remember those things, they still fear it and they say ‘Okay, things are getting better’ but you never know. For the last few years everyone has suffered so much that it cannot get out of their minds. They are taking it along themselves. (male, 29, unmarried, manager: private non-profit organisation)*

A bank manager (male, 33, married, MNC) explained that many employees in his organisation express fear using the phrase *“You can see it on their faces”*. Another manager (male, 50, married, private mobile service provider) observed that, due to terrorism, employees are fearful about coming to the office because they constantly think that anything can happen at any time. However, the views of the manager from the energy service provider (male, 28 unmarried) captured how witnessing a terrorist attack from their office, employees shared fearfulness:

*APS (attack) happened almost one kilometre away from our office. We could see the firing and whatever happened ... Of course, each and every single person in our office was frightened. They had this thing in their minds that any day, any time they can be targeted.*

*So there was fear, not in our organisation but in ... each and every sector that anytime anybody can be targeted.*

### ***Trauma***

Six managers stated that employees are traumatized and explained it in three ways: they are unable to work, they try to deal with it, and/or they act as though they are not affected. The manager from a non-profit organisation (male, 29, unmarried) explained that “*some employees have been very, very, upset, and couldn't come out of it. I feel they are still traumatized. They don't come to office, when they do they cannot work.*” Similarly, a manager from a private service organisation (female, 29 unmarried) stated that “employees including doctors, who have lost children in terrorist incidents, do not retain the same level of morale.” Another manager of a school chain (female, 45, married) explained that employees are traumatized but then “life has to go on” and they somehow deal with it. Alternatively, one respondent (male, 46, married, MNC FMCG) referred to an example of how employees may be suffering from post-traumatic stress would neither show it nor ask for anything:

*One guy on his motor bike was literally chased by a gunman from Swat to Peshawar (172 km journey) he showed no sign of fear ... must have been post traumatic being chased by a gunman. (But) for KPK men, showing fear is considered cowardly. They are still very macho. So, whoever was stressed out (by terrorism) would be expected to come up with a joke, make fun of the situation or the things that happened to them ... They probably went through their issues but they weren't equipped to deal with issues like that and it was never highlighted or brought to anyone's attention. Although a lot of things were happening in their minds, but they didn't express it and showed it as routine ... part of life.*

### ***Risk to life***

Most managers acknowledged the risk to life. One stated: “*It was not safe; we could only travel with the military convoy, so passengers were not going at all. Sometimes we were only getting helicopter to enter certain parts of KPK. It was that bad there*” (male, 46, married, MNC FMCG). Another commented: “*In our business ... You do cold calls and organise appointments*

where, you see people. The probability of success on cold calls was always low, but now they don't make cold calls because it's risking your life" (male, 33, married, MNC Bank). Another manager noted the particular challenge facing employees who worked in relief camps with over 8,000 families:

*Almost every week or twice a week, we received messages that suicide bombers are coming to attack the staff or the camp. Now, imagine you are working in a camp and you are receiving such type of messages that suicide bombers entered or they are entering ... An important point: under the camp management and humanitarian principles, security personnel cannot enter the inner part of the camp. They will provide their duty in the outer core of the camp. In that situation, when the security is not in the inner core of the camp, and you are receiving messages of the suicide bomber - so I think with this example you can better understand how theirs lives were at risk. (male, 33, married, undisclosed)*

#### ***Terrorism resilience/habituatation***

While terrorist attacks might have originally been extreme, the very nature of their continued occurrence somewhat nullifies this. This explains the complexity of stress of terrorism in terms of habituation, leading people to survive and operate in the most daunting situations. Thus, we term our last terrorism sub-theme *terrorism resilience*. For example, "(s)uicide attacks, ambushes and attacks on military - have become a norm in KPK ... at the end of the day they have to come to work and get into a routine. Otherwise it would totally negatively affect their work" (female, 65, married, private furniture manufacturer). Discussing on-going terrorism, respondents used phrases such as "has become a norm", "employees get tuned to it", "embrace it" and "get along with life". The following summarizes the sense of habituation/resilience:

*I believe that the impact is there, no matter what we say, advertently or inadvertently, but it's been happening for almost 10 years, people somehow are now getting used to it. Not that there is no impact on them, whenever anything happens then everything renews ... There are just carrying out with their normal chores and they are moving on with lives. I believe because probably when there is no way out then people sort of embrace things (female, 45, married, school chain).*

Three managers said that, as far as they were aware, their employees have not had direct losses and were thus not experiencing any traumatic terrorism stressors. Indeed, two respondents said employees are working effectively and efficiently. For example, a manager from a home delivery service (male, 27, unmarried) referred to a recent attack which killed six policemen: “*It was not big news for us ... the overall mentality of our employees has become used to these terroristic attacks. So, minor attacks now don’t even switch our brains towards the tension or do not make us upset.*” Further, a lack of concern is evident in a manager’s (male, 55, married, private large firm) comment about how employees become desensitized to the attacks:

*Once, a rocket flew over our office and hit the other boundary bungalow here in university town (place in Peshawar KPK). There was a big bang; there was damage to the property not to life. Nobody in my office ran, after a while people came back to normal life; and they were in their jobs ... Employees are not indifferent (to terrorism), they feel it. The feeling may be to the extent of a day, may go to the extent of blaming the government not doing something about it. But it has not hampered their life style and particularly their workplace.*

### ***Theme 1 Summary***

This theme highlighted the presence of terrorism stressors due to loss, fear, trauma and risk to life. They were several cases of extreme stress, and the employees might have been suffering from post-traumatic stress disorder due to the losses though the exactitude of it was difficult to determine. On the flip side, it also showed that some employees may have become resilient, insensitive or immune towards the stress. Further examples highlighted how terrorism can strike outside of work (e.g. being chased by a gunman, seeing terror-attacked sites) but, depending on the intensity of the experience, the effects can go on to affect the person over time.

### **Theme 2: Job stressors**

Overall, there was strong support for the theme of job stressors, with seven managers thinking that they were big sources of stress for their employees. For instance: “*Overall, I think job stress is more, because that’s something one has to address. We have to do the same amount of work that we had to, but while living with the fear. Terrorism we can’t do anything about*”

(female, 45, married, school chain). Job stressors had three sub-themes around workload, performance demands and working conditions.

### ***Work overload***

Three respondents mentioned workload as a source of stress. A manager from an energy service provider (male, 28, unmarried) explained that external conditions and environment were not as much a source of stress as the workload and environment within the organisation. Another from the private mobile service provider (male, 50 married) went further, stating that long office hours and working on the weekends to meet certain deadlines stressed employees. Another manager from a large private firm (male, 55, married) viewed the issue of electronic tethering, where technology ties employees to their work, as adding to their stress: *“people may feel stressed just because of (their) iPad, iPhone and they can be accessed through their emails, so actually the office work has extended to encroach up on their private life.”*

### ***Performance demands***

Five managers discussed performance demands as job stressors. One from a multinational bank (male, 33, married) clearly encompassed the views of other respondents:

*Job stress would be higher as compared to stress of terrorism, I think 60-40 or 70-30 given job stress is the higher one ... somehow all the corporates want is performance. Usually, it used to be year to year performance, but now given the hardest industry that I am in (banking), now they have come down to ... day-on-day basis performance. They want the business to grow so it is causing more stress.*

### ***Working conditions***

Three managers felt that working conditions and unsafe workplaces added to job stress. A manager from a private cigarette company (male, 33, married) stated that most employees were *“The work environment in this factory is not congenial and conducive... overburdened and overloaded with responsibilities; they usually get stressed. There are no safety measures ... they fear that they will get some sort of diseases because of the (poor) hygiene, dusty and noisy environment.”*

### ***Theme 2 Summary***

This theme highlighted the presence of job stressors such as work overload, time pressures, performance demands, and unsafe workplaces, aligning with the job stress literature in predominantly Western contexts. Overall, there was little difference in case of job stress in the Pakistani context. Importantly, this highlighted that, even in the context of living and working under terrorism, job stressors still play a pivotal role in the workplace.

### **Themes 1 and 2 overlap**

Five managers discussed the overlap of both stressors with three suggesting that both stressors were equal in weight and not easy to separate. A manager from energy service provider (male, 28, unmarried) explained: *“The stress of work and terrorism becomes too much. I have seen employees taking 2-3 pills (lexotinal) to relax themselves.”* Another (male, 33, married, undisclosed) similarly highlighted that employees were not only stressed about their lives being at risk because of the situation in FATA, but also by their working hours not being fixed and work overload.

Although seven managers clearly indicated that the job was the main source of stress, some of their later responses reflected an overlap with terrorism. As the school chain manager (female, 45, married) discussed, when *“employees see people in real life and on television losing their lives ... they are traumatized ... But job stress is a little more because that is something one has to address.”*

Two managers thought that, initially, terrorism stressors were higher than job stressors but, after living under terrorism for more than a decade, they felt that employees had become (somewhat) accustomed to terrorism and now the polarity of dominance has switched. Managers from a multinational bank (male, 33, married) and international non-profit organisation (male, 34, married) discussed the connection:

*Work stress is always there ... there is security-related stress as well. There is a bit of twist here. Nowadays, the security situation in Peshawar is much improved compared to couple of years back. So, security-related stressors have definitely gone down - that is my observation. The stress of work has surfaced more.*

*Given the challenges, employees are stressed. You see, there are different sources. The nature of job is front line sales and services. Geographically, where we are placed, there is unknown threat of terrorism, and considering the security around us, mobility is compromised. So, if you are in sales, it hinders your job performance and attaining sales targets becomes with biggest source of stress.*

There is thus evidence of stressors from job and terrorism but whether job stressors were really perceived as being greater than terrorism is somewhat harder to discern. It was difficult to separate the terrorism and job stress because respondents would often consider and discuss both, highlighting their interactive/additive nature. Thus, the collective influence is more evident in the next and final theme, the influence of the stressors on employee behaviour.

### **Theme 3: Employee behaviour**

All but one respondent felt that the stressors (job and terrorism) influenced employee behaviour at their organisation. The exception (male, 55, married, large private firm) thought that stress did not hamper the work. When it came to influencing employee behaviours, the majority focused more on terrorism stressors and barely discussed job stressors. Analysis highlighted various important behavioral consequences and, while typically negative, there were also some positives, concerning: performance, absence, turnover and extra-role negative and positive voluntary behaviours.

#### ***Performance***

A majority (12) of respondents discussed the influence of stressors on performance. Only one manager (male, 28, unmarried, energy service provider) stated job stress as the cause: *“Stress has negative impacts on employees. First of all, it affects efficiency, then effectiveness, of work. Important effect of job stress is that (employee) in his own work is not much focused.”* Ten respondents viewed terrorism stressors as adversely influencing organisational and employee performance. One manager (male, 33, married, private cigarette company) discussing an incident, explained: *“Today, when I visited the factory (manufacturing unit), everybody was talking about this horrible incident where around 30-40 people died. I mean, everybody feels stressed about it.*

*So, definitely it affects performance 100%.”* Another manager from a multinational bank (male, 33, married) spoke about losing performance to the extent that the business was relocated to a new (less dangerous) region: *“You will not find people really willingly wanting to go to the high-risk areas ... It is really frustrating because you cannot do so many things due to this fear.”*

Six respondents were of the view that, on the day of terrorist attacks, employees could not focus on their jobs. They explained that the closer the proximity of the attack, the greater the impact. Ultimately, performance was influenced adversely, with respondents using phrases such as *“productivity is going down”, “employees cannot focus”, “they don’t take interest”, and “they take longer breaks”*. The impact is evident as the manager expressed, *“In the APS incident ..., most of our colleagues had to lose their children in it and we know that they are working but they are not in that morale the way they used to be.”* (female, 29, unmarried, private service organisation)

On the other hand, a manager from the home delivery service (male, 27, unmarried) said that terrorism caused less anxiety because customers understood their helplessness in the case of a bomb blast. Paradoxically, one informant (male, 46, married, MNC FMCG) stated that terrorism helped performance and thus reduced stress:

*We were crossing yearly targets. Chitral was the only place where sales didn't grow, and employees would say that the problem is we don't have Taliban in Chitral. Rumour was that the Taliban liked our product. If we let the Taliban in Chitral, our volumes would go up as well. So, this was the kind of humour they were sharing. Actually, it was true, Chitral was the only town which didn't have Taliban and nothing was happening there.*

Four managers stated that absenteeism was also a reason for performance losses, discussed next.

#### ***Absence and Turnover***

Absenteeism was only associated with terrorism and not job stressors. Loss, trauma or anxiety caused by terrorism led to absence from work. By way of context:

*When blasts are happening around us, like the blast of the imambara, we were listening to all the firing and everything. But we had locked ourselves in the offices. All we could*

*do was just pray for them and us because we were expecting that maybe they come over here and start everything. But nothing as such happened to our side but we could listen to all the blasts and that was pretty disturbing. Nobody was working afterwards. Everybody left for their homes when the incident was over. And most of the staff was absent the very next day just to make themselves comfortable. (female, 29, unmarried, private service organisation)*

Another manager commented:

*She (an employee) didn't come for three days. When it's the first cousin (who died), you have to be in their house. In such cases, they have to take time off ... of course, it affects the production because they take time off ... Once they are back, I don't think that it affects their work as such, because its manual work. (female, 65, married, private furniture manufacturing)*

Overall, the respondents noted that, on the days after terrorist attacks, employees tend to leave work early, some before their lunch break. Broadly speaking, the managers asserted that employees “*are stressed so instead of having negative results, they leave early and they go home. Some of the people bring and take their medications but many leave early before lunch*” (male, 28, unmarried, energy service provider).

Ten managers thought that employees were either thinking of quitting their job and/or some had done so. The main reason for wanting to quit or actually quitting was because employees wanted to take their families to safety. The most frequently coded entries in this subtheme were “leave the city or country”. There were numerous cases such as employees being shot or injured, losing family or experiencing the death of a colleague due to terrorism, feeling trauma or stress of terrorism, not seeing any hope of peace, and fearing losing another family member, all of which led to their departure from the city or country. A manager (male, 46, married, MNC FMCG) explained that employees feel a certain sense of shame in expressing a fear of terrorism, for instance:

*An employee was shot in the street; he didn't ask the organisation for any assistance. He came after three days, asked for a good reference letter. The employee explained that he was*

*quitting the job to go to a far-off to a more peaceful city. So, even asking for favour or saying what had happened was disrespectful and dishonourable for him.*

A manager from a private, non-profit organisation (male, 29, unmarried) explained the implications for employee turnover:

*Stress of terrorism has effected such that people are quitting jobs in our province and going to other provinces or even out of the country ... while they work here; this thing in their minds that for the protection of their families they have to somehow get out of this city or province.*

The managers who had discussed terrorism and job stress both as factors of stress further responded that employees do not want, but have, to leave because of safety concerns. In-depth conversations revealed a spectrum of turnover-related behaviours such as employee intention to quit, frustration at not wanting yet having to quit, and quitting. Respondents often expressed that “they are always talking about moving out” or “want to move out”, and “given the opportunity if they find a better option ... people would leave.”

Further, some managers perceived that employees who did not quit were constrained by job immobility, financial or other restrictions such as family not wanting to move due to ties. One manager (46, male, married. MNC FMCG) explained how having family and ties initially stopped employees from leaving their job, but many still left if the situation (terrorism) became too much. His view summarized the complexity people were facing and their typical response to living under terrorism:

*Employees had their parents/grandparents and their homes there ... and they had been living and going through this. So, a guy who has lived in Bannu all along was not going to run away and go anywhere. If the Taliban had taken over Bannu and then he would have moved as a refugee to some other part of the province. So, most of these people were working not because of the job, they were there because they were locals of the area ... but the majority of the employees (at a certain point of Taliban control) were suffering from security issues and they would transfer their families to different large cities. It was basically life and death situation for most of the families at that time.*

Managers, who thought job stress was higher than stress of terrorism, when speaking about turnover, saw stress of terrorism as the main cause. One from a private cigarette company (male, 33, married) explained that higher-level management had the opportunity and resources to move their families to safer places but “*since everyone cannot get out of the country, they have to live with this situation.*”

Lastly, a bank manager (male, 34, married) evidenced turnover and migration from the city:

*You don't see your own people; they are literally quitting the city. New people are coming from the neighbouring places. So many things are changing for us that it becomes very difficult for us to cope up with in everything. A lot of employees have left ... All that is on your mind is how do you get out of this mess.*

Interestingly, three respondents who thought the stress of terrorism was higher or equal to job stress responded that these stressors are not a reason for turnover. A manager from a local bank (male, 34, married) explained that “*there are certain requests for transfers, where employees want to be transferred to other branches across country (from high risk to low risky areas), but no one is quitting.*” Two felt that, if their employees ever think of leaving, it will be for a better opportunity or income. For instance: “*If some ... left the job it was not because of the situation or stressful conditions it was because of their personal interest, like they got a better opportunity somewhere else.*” (male, 33, married, undisclosed). More specifically:

*No employees have left because of unsafe environment. They have to work, and where can you go in Pakistan and that it is safe ... They would prefer to take up employment in Dubai or Saudi Arabia, not because of terrorism; but because they will get more money. (female, 65, married, private furniture manufacturing)*

#### ***Extra-role voluntary positive and negative behaviours***

Two additional sub-themes surfaced based on two types of employee behaviours towards their co-workers and peers. In most cases, they also co-existed: (1) *employee positive behaviour* (e.g. caring for co-workers), and (2) *employee negative behaviour* (e.g. being frustrated and rude towards co-workers). Terrorism brought positive behaviours out of employees:

*Employees have done wonderfully well and filled those gaps where they were not supposed to do the work. It is bringing us together because the pain is the same ... we are more cohesive and can work better by understanding our pains, which are common. I would take this as a blessing in disguise, for people like us. The one thing that has enabled people to go through this and live through this is that they are together. (male, 34, married, local bank)*

Similarly, other managers used terms such as “*colleagues have become more attached*”, “*increased bonding*”, “*getting better with each other*” and “*support and cooperate*” for employee behaviour towards each other. However, not all employees behaved positively towards their co-workers, and of the 12 managers who stated that stress does encourage negative behaviour, only one attributed this to job stressors.

The remaining (11) perceived that terrorism stressors made employees frustrated, irritated, angry and rude. Further, a quarter of the managers expressed that employees end up taking longer lunch breaks, and skip work by putting proxy attendances. Despite the extremity of the context, none highlighted any serious negative behaviours such as violence. For example, “*[employees] quarrel with each other because of the stress. They have stress on their minds. When they come to the factory, they are not empty minded they bring a lot of issues (worry about the security of the family) from their houses every day. (male, 33, married, private company)*

One manager (male, 28, unmarried, private company) highlighted how both employees and managers were affected by terrorism:

*After a terrorist incident, employees had rather rude behaviour. The reason behind it was stress. So, there is work stress, other things outside the office and, on top of it, the ‘security concerns’. If manager or anyone says even the smallest things, employee is on the verge and his temper shoots ... (after an incident had happened).*

### ***Theme 3 Summary***

Overall, this theme highlighted the influence of stressors on employee behaviour in terms of performance, absenteeism-turnover and voluntary behaviour. This largely originated from terrorism rather than job stressors, with interviewees indicating that they are intertwined and often

hard to separate. Importantly, the evidence suggests that extreme EOS factors like terrorism can have somewhat detrimental influence on employee behaviours, but these effects are not universal.

## **5.6 Discussion**

Our findings can be best explained through the application and extension of CoR theory (Hobfoll, 1989; Hobfoll et al., 2009). We discuss individuals' emotional and psychological resources below by considering: *what is the nature of terrorism stressors in Pakistan workplaces, and how do the terrorism stressors relate with job stressors?*

Most managers (13) informed us that employees in their organisation had lost family, friends or colleagues and suffered from trauma because of it. Some even suggested that employees might be suffering from PTSD, in-line with previous studies of people in Pakistan (Khalily, 2011). Trauma from terrorism and PTSD was reflected in the responses but no extreme outcomes were highlighted. Previous research has shown mixed results in terms of terrorism causing extreme stress (Hobfoll et al., 2009), including no relationship between exposure and psychological distress (Bleich et al., 2003) and a strong positive relationship (Galea et al., 2002). In trauma, numerous factors impact on individual behaviours Columbus (2006), the complexity of the stress of terrorism was evident from all respondents having had indirect exposure – having seen losses – but not considering themselves ‘affected’. They thought that this was only pertinent to someone who had experienced direct loss of life. This is understandable, given the large numbers of deaths and injuries in Pakistan.

As Wessely (2005) explains, people can become habituated to the new anxiety. Bongar et al. (2007) add that, over a long period of time, terrorism victims may become accustomed to living under terrorism. The same rationale may have led seven respondents to suggest job stressors were stronger than terrorism stressors, but once they started talking, only two of them continued to discuss the job as a bigger stressor than terrorism. These are human ways to find normalcy in life to have a sense of control and be able to deal with it, Shalev and Errera (2009) offered the term ‘stability with instability’. This can be understood through CoR because people want to conserve their resources and not allow the constant threat to deplete their psychological resources.

Those unable to do so end up suffering from severe stress consequences including PTSD and depression.

Our last question addressed: *How do terrorism stressors influence employee and are the effects of universally detrimental?* As expected, performance was negatively influenced by stressors and, even though job stress was considered to be an important factor, most respondents attributed it to terrorism. Performance was also impaired because of absenteeism, which related solely to terrorism. This study adds cultural and contextual understanding of absence and relates it to grief, as the respondents supported employees' absence (e.g. to attend funerals) with or without formal approval, and accommodated transfer requests.

Some expressed that performance was effective because employee understood each other's pain and society's sufferings, and thus worked harder to provide support. Similarly, managers understood that in trauma, employees might behave rudely. Using CoR, managers support employees so that they can gain psychological strength. Managers may want to conserve their own and their employees' psychological resources by being understanding, meaning that providing support may benefit but also deplete the resources. It also resonates with research focused on mental health in disasters, which shows that, straight after a disaster, people have higher altruistic tendencies which taper off with time (Neria et al., 2009).

When deemed too stressful, one tries to conserve energy by thinking positively and using the situation so that the least amount of psychological resources are depleted. Thus, being altruistic and helping others are ways of reappraising the situation, and conserving or building psychological strength. We noted that employees' bonds became stronger in times of adversity and led to improved co-worker interactions. This might be explained by social support theory where, in cases of terrorism and extreme stress, people seek social support (Hobfoll et al., 2009). These differences in behaviour might also be due to the provision of organisational support which, while found to be a relatively strong predictor of beneficial outcomes for individuals and organisations in the extant research (Bader, Berg, et al., 2015b; Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002), has not been as widely researched in the context of terrorism-afflicted countries (Bader et al., 2015). In contrast, we also found collective misery

leading to people losing patience, similar to the *pressure cooker* concept (Hobfoll & London, 1986) where sharing misery creates more pressure and sorrow.

Overall, our study provides insights to managers and researchers about an important contextual stressor, and indicated how little is understood about the complexities involved in living under terrorism. This study highlights factors that might not have been captured via quantitative study, and thus the benefit of interviews and in-depth probing for providing detailed understanding. However, it has limitations. Due to the difficult nature of the study and sensitivity towards the well-being of respondents, the small sample size was small. We used only in-depth interviews from a single source. It is possible that managers' assessment of employees' stress may not be as accurate as compared to their observation of employee behaviour since stress is more subjective and covert; and the behavioural consequences are more overt and observable. Furthermore, employees may be suffering from PTSD but this may not be an aspect that employees seek to bring to the attention of HR managers. This extreme outcome of terrorism stressors might thus simply be unknown among our respondents yet be experienced by employees. Likewise, social desirability may have operated, with managers thus perhaps not wanting to highlight such issues.

Thus, important questions arising from this research include: when terrorism occurs for extended periods, how far would people be able to be supportive, how can organisations help, and what are the implications for employees' psychological well-being? Hence, we encourage exploration of stress of terrorism and PTSD in the workplace to better understand its influence on employees (Junaid & Haar, 2016). More research on employees in such contexts might clarify these issues. We urge HRM and organisational behaviour researchers to utilise literature from other disciplines as a starting point for developing better understanding of phenomena outside the organisation that influence employees within them.

## **5.7 Conclusion**

The purpose of this research was to explore terrorism as an extreme EOS and to deepen understanding of the effects of terrorism within the organisational sciences (James, 2011). Pakistan provides a unique opportunity to inquire into how living under extremely stressful

conditions such as terrorism can influence employee behaviour; indeed, while we found evidence to support job stressors, terrorism stressors appear to have most impact. In the future, terrorism stressors are likely to have wider implications not only for individuals but also organisations. We encourage further exploration (e.g. on job outcomes), especially in terms of understanding how employees cope with these stressors (e.g. Junaid and Haar, 2016). In addition, large numbers of people flee terrorism-affected countries due to their hostile and unsafe environment (Gambino & Jalabi, 2014), and bear the burden of stress (Jamil et al., 2002) which accompanies them to the host countries and organisations. It is timely to address these issues in management and organisational studies due to their potentially global implications within and beyond workplaces in terrorism-affected countries and beyond.

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**Chapter 6**  
**Security-Related Perceived Organisational Support: An Exploration from Terrorism**  
**affected Workplaces**



**MASSEY UNIVERSITY**  
GRADUATE RESEARCH SCHOOL

**Statement of contribution to Doctoral Thesis containing publications**

(To appear at the end of each thesis chapter/section/appendix submitted as an article/paper or collected as an appendix at the end of the thesis)

We, the candidate and the candidate's Principal Supervisor, certify that all co-authors have consented to their work being included in the thesis and they have accepted the candidate's contribution as indicated below in the *Statement of Originality*.

**Name of Candidate: Fatima Junaid**

**Name/Title of Principal Supervisor: Professor Jane Parker**

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**In which Chapter is the Published Work: 6**

Please indicate either:

- The percentage of the Published Work that was contributed by the candidate: and / or
- Describe the contribution that the candidate has made to the Published Work:

This paper is based on the qualitative and quantitative data collected in study 1 and 2, and discusses contextual perceived organisational support. I had conducted the interviews in late 2015, and then developed the survey which was then approved by my supervisors. I was solely

responsible for data collection. My supervisors ensured that the survey was designed, and that the analyses were conducted correctly. I drafted this paper in June 2016. However, the biggest challenge was the word count. My supervisors helped and guided me in structuring the paper in a better way. It was then presented at the Australia New Zealand Academy of Management 2016, in a competitive session. I revised it using the feedback from the conference, and my supervisors reviewed it. I sent it then to *Personnel Psychology* earlier this year, where it was not accepted. I used the suggestions, and have submitted it to *Journal of Vocational Behavior* in August 2017.

*Fatima Junaid*

August 5<sup>th</sup> 2017

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Candidate's Signature

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Date

*Jane Parker*

August 5<sup>th</sup> 2017

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Principal Supervisor's signature

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Date

*Jarrod Haar*

August 5<sup>th</sup> 2017

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Co-author's Signature

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Date

## Chapter 6

### **Security-Related Perceived Organisational Support: An Exploration from Terrorism-affected Workplaces**

#### **Abstract**

Perceived organisational support (POS) is well established in the Western context, but under-researched in relation to employees living under ongoing terrorism. This study explores POS for employees in terrorism-affected Pakistan. In the first study, 15 human resource managers were interviewed, with thematic analysis showing clear distinctions between POS and organisational support towards security (around terrorism). A follow-up study with a sample of 146 Pakistani employees used factor analysis and confirmed that Security-POS is distinct from POS. Mediation (monte carlo) analysis confirming that Security-POS enhances POS, which in turn positively influences job satisfaction and work-life balance; and negatively influences work-family conflict.

Keywords: organisational support, safety, terrorism, Pakistan, qualitative, quantitative.

#### **6. 1. Introduction**

Management science literature on terrorism mostly focuses on single terrorism incidents (Howie, 2005; Ryan, West, & Carr, 2003) such as the 9/11 (Perlman et al., 2011), the London attack (DiMaggio & Galea, 2006) and Oslo bombings (Nissen, Birkeland Nielsen, Solberg, Bang Hansen, & Heir, 2015). The existing literature about (local) employees experiencing ongoing terrorism has mainly come from the Israeli context (Besser & Neria, 2009; Hobfoll et al., 2008; Shalev & Errera, 2009; Toker, Laurence, & Fried, 2015); beyond this, little is known. Thus, the scholarship on living under terrorism needs further contribution (Toker et al., 2015), as do studies in non-Western cultures (Barkema, Chen, George, Luo, & Tsui, 2015).

This study attempts to add to both of the aforementioned gaps, by exploring organisational support for employees living under on-going terrorism. As such, ongoing terrorism might lead to employees needing more or different forms of support, where organisations can play an important role in helping employees. Organisational support theory (OST) is based on employee perceptions regarding how much their organisation values them and cares about their

well-being measured through perceived organisational support (POS). (Eisenberger, Huntington, Hutchison, & Sowa, 1986). With the wide spread meta-analytical support (e.g. Kurtessis et al., 2015; Rhoades & Eisenberger, 2002) little is known about how POS operates in organisational settings where terrorism is a daily occurrence (Junaid & Haar, 2015). Pakistan provides a setting of continuous terrorist attacks lasting well over a decade (Intitute of Economics and Peace, 2015). Even by conservative estimates, in Pakistan, more than 2,000 civilian lives have been lost every year over the last decade due to terrorism (International Physicians for the Prevention of Nuclear War, 2015). Despite ongoing terrorism, organisations still operate, and people continue to attain workplace objectives as well as support their lives and families. This is a unique opportunity to understand employee perceptions regarding the nature and role of organisational support while working under on-going terrorism. For instance, while POS focuses on the well-being of employees (Eisenberger et al., 1986), does a terrorism context change the nature of such support?

Overall, POS studies are heavily embedded in Western context set in peaceful environments (Kurtessis et al., 2015), or focus on one-time terrorism incidents (Schouten, Callahan, & Bryant, 2004). Our research explores whether the most established support construct – POS - could be applied to the context of living with ongoing terrorism. The importance and timeliness of our research is evident as management science researchers have been called to research on turbulent environments (British Academy of Management, 2016); terrorism (James, 2011a, 2011b; Toker et al., 2015) and, more specifically, focusing on the role of POS in hostile environments (Bader, Schuster, & Dickmann, 2015).

Our paper makes three contributions. First, the inquiry represents the unheard voices of employees in areas where workforces struggle with genuine life and death contexts daily. It shapes our understanding of how POS might operate in such challenging contexts; thus, helps to build OST in a terrorism context. Studies of existing concepts in different contexts help with theory building, and it has been noted that the terrorism context needs conceptual development (James, 2011a; Peus, 2011). Second, we undertake two studies, where the themes discovered qualitatively are confirmed by the quantitative empirical survey. This provides depth and confidence to extend the existing concept of POS to include a new contextual dimension. Third, we help organisations

by providing better understanding that organisational support can benefit the employees in real life. Thus, we provide both theoretical and practical advancements for scholars and organisations.

Next, we discuss OST in the context of ongoing terrorism, and argue that POS needs exploration in cases such as the environment of ongoing terrorism; which helps us build our research questions. We address the questions in our first study by conducting interviews. The analysis of the interviews highlights that POS is indeed different in the said context, which then leads to developing a contextual scale. This newly developed scale, we test in our second study through questionnaires. We describe the methodology of each study separately. After presenting the two studies we discuss the findings and implications.

## **6. 2.        Organisational support theory**

OST is pivotal in explaining employee-organisation relationship; based on social exchange theory (Emerson, 1976), and the norm of reciprocity (Kurtessis et al., 2015), when employees feel cared for, they may become more productive, committed and satisfied with their job. In addition, they will be less prone to absence, turnover and undertaking deviant workplace behaviours (Kurtessis et al., 2015; Rhoades & Eisenberger, 2002). Thus, POS is often beneficial for both the organisation and its employees. There are a handful of studies which have looked at POS in hostile environments, but these are with respect to expatriate assignments (Bader, Berg, & Holtbrügge, 2015). In those studies, no conclusive research support is available about the role of POS especially in the case of ongoing exposure to terrorism (Bader, et al., 2015). Furthermore, the studies on expatriates are not entirely comparable to one which examines people living in the regions as locals because of three major reasons. First, the expatriate always has a choice to leave the area and go back to his or her own country; the locals do not have the same liberty/choices. Second, the expatriate often functions as a high-level official in a position of authority and control with considerable protection or works in humanitarian fields, knowing the threats at hand. The locals do not have the same kind of security protocols in place for them thus they have to work in unexpected and threatening situations. Third, exposure to terrorism may not be for the duration suffered by local people. The expatriate comes to the host country for a limited time, and knows the options and time of return; for the local there is no such solace or intercession.

The number of studies looking at POS in a terrorist context is extremely limited and none of these have explored the nature of POS in countries where terrorism occurs constantly. We suggest that Pakistan provides a setting where an in-depth inquiry into organisational support can be effectively conducted. A review of the pertinent literature highlights key gaps in extant knowledge, and based on these, our two primary research questions are: (1) what support do organisations provide employees in the challenging and taxing context of on-going terrorism? And (2) what does organisational support look like in these situations? Specifically, can the Western construct of POS (Eisenberger et al., 1986) used in the case of peaceful environments be extended to this context of living with on-going terrorism? Or would employees' perception of organisational support differ due to the extremity of the context?

In order to respond to these questions, two studies were conducted. The first was qualitative, exploring how organisational support is perceived, and the nature and level of support available to employees. Based on the findings of this study, (2) develop an instrument and test the context-sensitive POS. To provide new insights on POS in the context of living with on-going terrorism, the research was conducted in the worst affected areas of Pakistan (South Asia Terrorism Portal, 2016); Khyber PakhtunKhwa (KPK) and federally administered tribal areas (FATA).

### **6.3. Study 1**

#### ***6.3.1. Methodology: Sample Procedure and Characteristics***

The study used semi-structured interviews with 15 managers (Line/ HR), to provide a broad range of insights into employees and employer views (Mays & Pope, 1995) with respect to the Pakistani context. Due to the potentially extreme nature of the terrorism in which their workplaces function, we felt it would be easier for managers to talk about their employees rather than their own experiences. Thus, the distal nature of the questions (i.e. about others and not the self) encouraged greater clarity in providing information regarding the potential role of POS. Managers were selected via the first authors personal contacts and contacted via email briefly outlining the project. The interviews were conducted over the telephone, recorded (with permission) and then transcribed. Most interviews lasted 30 minutes. All interviewees were

scheduled after work hours or on the weekend. The interviews were conducted from September to October 2015.

Full university ethics approval was attained for the research. The ethics process required that direct victims (i.e. those with direct loss) be excluded from the study. We followed the NATO guidelines for managing psychosocial services for people involved in major incidents, conflict, disaster and terrorism (Williams et al., 2009), and exercised due diligence in dealing and conducting research involving people exposed to trauma and or terrorism. We ensured that respondents themselves would not have experienced direct loss or severe exposure to terrorism. Each interviewee was thus first asked about direct loss and then their willingness to participate in the study. Direct victims of terrorism were not included; this helped to reduce potential pain and bias due to personal loss. Notwithstanding this, all respondents noted they were aware of acts of terrorism in their everyday lives. Table 6-1 provides a breakdown of respondents and their organisations.

Of the 15 respondents, 12 were male and 11 married, ranging in ages from 28-65 years. All identified as Muslims except for one Christian. The majority (nine) were from the private sector followed by three from non-profit organisations, and two from public sector organisations. The personal characteristics of the sample are representative of the national population as the (United Nations, 2012) notes that women are dismally represented in the Pakistani labour force at 22%, and mostly concentrated in informal labour market and home-based work. Similarly, Pakistan has a 96.4% of Muslim population and only 3.6% who represent other religions (CIA, 2016). Education statistics did not match that of the sample, because the study sample was managers, with computer literacy, and internet access.

**Table 6-1: Study 1 Sample Characteristics**

Manager No.	Firm Size	Organisational Type	Age	Gender
1	450	Energy service provider*	28	male
2	185	non-profit organisation*	29	Male
3	95	Local Bank*	34	Male
4	1000	Cigarette company*	33	Male
5	2,200	Helping service organisation*	29	Female
6	60	Mobile service provider *	50	Male
7	65	Project based company*	34	Male
8	12	MNC Bank*	33	Male
9	100	Public sector: School Chain	45	Female
10	13	International non-profit	34	Male
11	47	Home delivery service*	27	Male
12	600	MNC FMCG	46	Male
13	125	Furniture manufacturing*	65	Female
14	250	Large private firm	55	Male
15	40	Not disclosed	33	Male

**\*Private Sector**

Respondents were typically male (12/15)

Respondents were typically married (11/15)

Respondents were aged between 28-65 years.

All identified as Muslims except for one Christian.

**6.3.2. Semi structured interviews**

In order to comprehend POS in the terrorism context, interviewees were asked three questions: (1) what support do organisations provide to the employees, and to what extent do employees think that the organisation is supportive?; (2) to provide ‘specific examples of how the organisation provides support’; and (3) ‘how helpful do they think this type of support is for employees?’ (If they responded that it is not very helpful, they were asked what barriers might cause this).

**6.3.3. Analysis**

Responses were coded using NVivo 10. NVivo allows researchers to develop themes by going from broad to narrow and vice versa (Richards, 2009) and the latter was followed (from narrow to broad themes). For instance, monetary gains and flexible timings were coded into POS; while providing armed guards was coded into Security-POS. An independent management researcher was asked to randomly select five interview scripts and code them to check the validity

of the coding. There was strong similarity between their main themes. Overall, four themes were found: (i) POS, (ii) Security-POS (regarding terrorism), (iii) POS as a hindrance to work, and (iv) No POS. These key themes are discussed below.

#### **6.3.4. Findings**

Variations were found across respondents' views regarding the POS that their organisation provided. Of 15, only two managers discussed POS without referring to terrorism. For the rest, the context of on-going terrorism overshadowed the responses regarding POS. Nine stated that their organisations were providing support while four said they were not. The quotes are provided in a separate table, however with the reference of the quotes, the age and gender of the manager is provided. The direct quotes referenced below are provided in table 6-2.

1. *POS*: Two managers felt that organisations provided support in terms of care and monetary gains. The manager of a home delivery services whose organisation has not suffered any losses felt terrorism was not a factor affecting their organisational life. Thus, the organisational support was discussed without any mention of context [27 years, male: reference 1]. He also attributed absence of fear or any other effects of terrorism to the organisation having a young (all less than 40 years) and all-male workforce.

2. *Security-POS*: Thirteen out of the 15 interviewees in the first couple of minutes of the interview drifted from organisational POS towards discussing context of terrorism and how POS related to it [45 years, female: reference 2]. The complexity of living with terrorism can be summarized by this comment from a HR manager from a local NGO who expressed a sense of helplessness [29 years, male: reference 3]. The majority (13) of the managers discussed POS in the form of armed guards and security, reflecting that terrorism is an important issue for both employees and their organisations. Nine said that there is good support because their employers provide heavy security for employees, while four viewed organisations as not supportive because they were not providing effective security. A senior manager, who also worked as an independent consultant on various projects, concurred regarding extreme security measures he added [55 years, male: reference 4]. Two other managers, one from non-profit and the other from the profit

sector, explained that they hired security teams to undertake initial environmental scanning so as to ensure the security of the area.

In some cases, this had to be done daily [34, years male: reference 5]. Other security-related support was discussed by the managers from a large bank (34 years, male) and a Multinational company (46 year, male), noting that, at times, travel was only possible through military convoy or helicopters (e.g. in FATA or Parachinar) so the organisations provided support and security in that way. Other forms of support associated with terrorism were caring initiatives for employees'; comfort in risky areas; offering flexibility in terms of choice of risky locations; hiring local employees due to safety concerns; and giving time off from work to staff who had either lost family or were traumatized. Most managers responded that their organisations provided security checks; and trained security guards with bullet proof jackets, arms and security vehicles.

*3. POS as Hindrance:* Even though providing security and guards was considered supportive, (4) several managers felt that, at times, employees got irritated and frustrated by on-going site and physical searches, for example [34 years, male: reference 6].

*4. No POS:* The absence of POS was also coded separately because it reflected the perceptions of the managers. For example, some managers said outright that they do not have support; others stated that employees have left due to non-financial support or that the organisation does not care about those in vulnerable areas. An important point on "no POS" was that it was only discussed in relation to terrorism. One manager from a private manufacturing firm gave the example of an incident where a loyal employee had been working for the last two decades left due to no support [33 years, male, reference 7]. Others expressed the lack of support with regards to terrorism and in terms of security [28 years, male: references 8; 29 years, female: 9; and 33 years, male: 10].

**Table 6- 2: Study 1 Direct Quotes**

Ref	Quote:
1	“They [employees] are a great asset for us; we do not want them to be frustrated. Since we are a kind of virtual organisation and keeping an eye at all times is a difficult task. We are working to build their loyalty; we do not want our employees to switch or leave us. For example, there is room for them whenever they are free they come in take rest for a couple of hours, have tea, and hang out there. We have developed a rotation system to promote them from their current position and to change their job specifications, because exposure to the same job for sufficiently longer time can frustrate an individual...”
2	“(t)he owner and the CEO...They try to give them as much support as they can by way of monetary gain, emotional support...They try as best as they can to look after them”. Later, they went on to discuss POS in relation to terrorism: “They have been given guards with (bullet proof) jackets and proper guns”.
3	“Basically, the organisations are working here because they have to work here, they cannot shift to any other province or city. They can direct employees not to go to crowded areas, but they cannot protect employees to a large extent. They can protect them within the premises, but even then they cannot fully guarantee their safety. Our organisation is trying; all the organisations are trying. But terrorism is such an act that they cannot fully guarantee anything, they can just tell employees to be safe”.
4	“The organisation had CCTV cameras to monitor who comes in and who goes out, and outside the premises to monitor that no one plants a bomb...Even if we go to cafeteria, or other key places; people are checked”.
5	“[After the initial environmental scanning], we hired security officers who would give employees clearance report of the threats that day then employees would know which areas to go to and which places to avoid”.
6	“We were working for an American company, their security officials used to come often to guest houses (where employees were staying) and the workplaces to check whether employees were involved in any suspicious activities or not. This really irritated our staff and employees complained that they didn’t like being searched again and again”.
7	“His father was kidnapped, and he asked the organisation for monetary support. The organisation could not provide it and then he lost his father and later left the job [This was neither the first nor the only time it happened]”.
8	“It’s a developing country, I don’t think in our kind of organisations there is anything like that. They don’t care about their employees, that they would arrange some extra security, to prevent such activities”.

**9** “The organisation doesn’t support employees much. All they do is just go for DUA (condolence after the loss of life in terrorist incident), and nothing more than that. Nothing as such is given as support. Because the situation is that it happens very frequently and they can’t let people go on breaks”.

**10** “We should prepare them for handling stress and provide them stress management training and risk assessment (risk to life), so they will be prepared for these kinds of situations. But unfortunately, it doesn’t happen. There is no support here”

### **6.3.5. Summary.**

The interview comments overwhelmingly related to the context of living under on-going terrorism. The most dominant response concerned the provision of armed security guards with bullet-proof jackets and check posts to secure the premises for employees - so much so, that at times it was seen as a hindrance in the way of work. The “no POS” responses showed that managers seemed disgruntled by their organisation’s passivity and habituation. Overall, concern with employee physical safety emerged as the most dominant aspect of POS.

### **6.3.6. Discussion.**

The managers’ comments showed that organisations are trying to support employees but their initiatives may differ from, or fall outside, of the conventional conceptualisation of POS. It emerged that terrorism is prevalent that is perceived to exist more outside of an organisation (Hussain, 2016; Marsh, 2015), and organisations can at best try to protect employees while they are at work. It is realistic that employees living under ongoing terrorism mainly stressed security and safety rather than any other interventions (e.g. Grieger, Fullerton, and Ursano (2003) discuss psychological counselling and compensation programmes which are common interventions offered in and by organisations following calamities). This shows that the context of our study differs from the general Western setting of exposure to terrorism, where it is not an everyday occurrence therefore organisations are prepared with security and surveillance before any such incidents and can provide with psychological interventions after it happens (Schouten et al., 2004).

Importantly, study one shows that for employee well-being and OST could be extended to move beyond the ‘Eisenberger and colleagues construct of POS’ - and specifically target security for employees working in an ongoing terrorism context. As such, OST might incorporate Security-POS where organisations make it a specific focus around keeping their workplaces (and thus employees) safe from harm related to terrorism activities.

Therefore, if employees are provided with armed guards and bullet proof jackets, it is likely that they will perceive themselves to be safe, however keeping the terrorism under consideration, that does not mean that they are safe. It is only a perception that can help them. All

the incidents that were reported in the thesis (such as the Army Public school and the Imam bargah) they all had armed guards, with barbed wires and built proof jackets. The point here was that if the organisations provides this, it may give them a perceived sense of security-which by no means is the reality. Lambert (2000) argued that benefits which are given across the board to all employees, they will also effect employees behaviours, but it will depend on the perceived usefulness of the benefits. The same rule applies to security. Some people value physical security more than other, whereas some thought (in the interviews) that it was hassle. Therefore, my argument is that first, the security provided does not necessarily protect employees, but is based on the perception of the employees feeling safe. Second, its effect is only determined by how far employees value it.

Based on the findings of Study 1, we developed a context-based POS instrument, discussed next.

#### **6.4. Study 2**

##### ***6.4.1. Methodology***

Since Security-POS surfaced in Study 1 as a different construct to the established POS (Eisenberger et al., 1986), we decided to develop items to explore Security-POS. Having contextual knowledge about POS while living under terrorism, the second study aimed to discover whether Security-POS was distinct from POS. We contextually defined Security-POS in the light of the qualitative data as “The belief/perception of the employees that the organisation cares; based on the physical security the organisation provides to the employees”.

This by no means infers that employees are in reality safe from all threats of terrorism, because in the context of terrorism no organisation can ensure the safety of its employees. For instance, a rocket can blast the entire building including the guards, despite all safety measures it is a possibility beyond control. Another common example is that despite several layers/levels of security, the suicide bombers still enter organisation and blast themselves. This happens because the bombers are often aware of the security protocols, and make plans where the guards are outnumbered by the terrorists. This happened in APS case that was discussed in the thesis. The important factor in the latter example is that terrorists care neither for their own nor for anyone

else's lives. Whereas the guards have to protect lives. In such cases it is not uncommon to see the security personnel losing their lives. No security jacket can save the guards from the effects of the bombers. Since such incidents are common, employees are well aware of the fact that organisation can only try to protect them, but their efforts do not reflect absolute protection.

Next, we argue that Security-POS takes precedence over POS. This is argued from the perspective of needs theory. Security being a more primary need, as compared to belonging (appreciated), rewarded and given feedback and support. Thus, Security-POS will come before POS. It was also reflected in the interviews, where when employees felt that there was a high risk to life, despite effective rewards and POS they declined to stay there.

In addition, we chose three outcomes based on two reasons. First, we chose common outcomes associated with OST from the literature, specifically a typical outcome (job satisfaction), and a less studied outcomes (work-family conflict), both have meta-analytic support (Kossek, Pichler, Bodner, & Hammer, 2011). Second, we suggest that terrorism being a non-work factor has implications for both work and non-work aspects of employee life. Therefore, we explored work-life balance which has generally not been explored.

Meta-analysis supports that POS is expected to be positively related to job satisfaction and work-life balance and negatively related to work-family conflict (Kurtessis et al., 2015). We suggest it is possible for Security-POS to have similar effects on outcomes as POS, for example, those with higher Security-POS may feel less threatened and more cared for – in a security/terrorism context, and thus feel obligated to reciprocate with more positive work outcomes like job satisfaction. Thus, we hypothesize that

H1: Security-POS and POS will be distinct from each other,

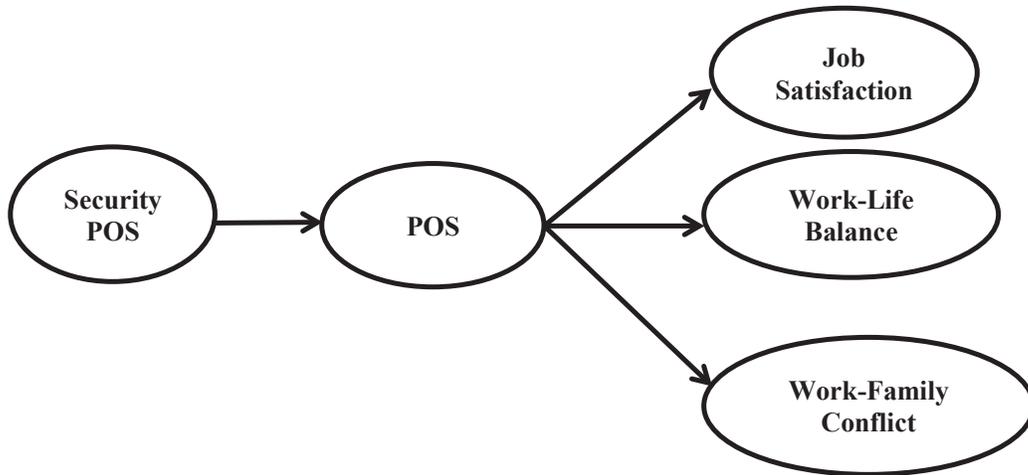
H2: Security-POS and POS will both be positively related to job satisfaction

H3: Security-POS and POS will both be positively related to work-life balance

H4: Security-POS and POS will both be negatively related to work-family conflict

H5: POS will mediate the influence of Security-POS on outcomes, such that Security-POS will operate as a component of POS, ultimately signaling an organisations interest in the life and well-being of employees. Figure 6-1 shows our study 2 model.

**Figure 6-1: Theoretical Model of Security-POS, POS and employee outcomes**



#### **6.4.2. Sample**

In total, 146 employees responded to the survey (76.4% response rate). A possible reason for this high response rate is the salience of the topic, to which many respondents felt they could relate. Purposeful sampling was undertaken to attract respondents (Coyne, 1997) for two key reasons. The ethics committee had highlighted that only those people without an immediate loss in the last month (preferably two months) should be contacted, and we adhered to the NATO guidelines (Williams et al., 2009), which demanded caution and diligence. Therefore, purposeful sampling became the most suitable sampling choice.

On average, participants had an average age of 31.7 years (SD=7.9 years). They tended to be male (78%), married (55%) and a parent (51%). Average job tenure was 5.5 years (SD=5.8 years) and on average they worked 42.4 hours per week (SD= 11.6). The majority of respondents were highly educated, with 62% having a graduate qualification (e.g. Master's degree or MBA) and 37% having a Bachelor's degree. By industry sector, 41% of respondents worked in the private sector, 39% worked in the public sector and 21% worked in the not-for-profit sector.

### **6.4.3. Measures**

All survey items were coded 1=strongly disagree through 5=strongly agree. POS measured with 8-items from Eisenberger et al. (1986). Security-POS was measured with 4-items, developed for this study based on the qualitative data from study 1 and it included one established item “I feel safe at my workplace” (Nissen et al., 2015) to provide a general overview of safety. We conducted an exhaustive review of literature on safety at work in relation to terrorism (Bader and colleagues), but found it to be concerned with expatriates rather than a local population. This is important because locals cannot simply choose to go home. We also looked at safety climates but these works were without a focus on extreme events like terrorism (e.g. Cox and Cheyne (2000) “In my workplace managers/supervisors show interest in my safety”). Further, we confirmed the appropriateness of the items with two independent HRM professionals and two unrelated HRM academics. We confirmed the distinct nature of Security-POS and POS by using exploratory factor analysis (EFA), with the data splitting into two distinct factors as expected. Table 6.3 shows all items, factor loadings and reliabilities, and provides evidence of construct validity for our Security-POS measure as distinctive from POS.

**Table 6-3: Results of Exploratory Factor Analysis**

Questions followed the stem "My Organisation..." and were coded 1=strongly disagree, 5=strongly agree	Factor Loadings	
	POS	Security-POS
1 I feel safe in my workplace from the threat of terrorism	.253	<u>.799</u>
2 My organisation provides armed security at my workplace	.149	<u>.771</u>
3 I feel safe at my workplace	.211	<u>.761</u>
4 My organisation values workplace security	-.072	<u>.719</u>
5 My organisation cares about my general satisfaction at work	<u>.798</u>	-.023
6 My organisation really cares about my well-being	<u>.779</u>	.230
7 My organisation really cares about my well-being	<u>.762</u>	.103
8 Even if I did the best job possible, the organisation would fail to notice [Rev]	<u>.750</u>	.184
9 My organisation values my contribution to its well-being	<u>.749</u>	.294
10 My organisation would ignore any complaint from me [Rev]	<u>.698</u>	-.005
11 My organisation shows very little concern for me [Rev]	<u>.691</u>	.131
12 My organisation fails to appreciate any extra effort from me [Rev]	<u>.683</u>	.148
Eigenvalues	4.514	2.554
Percentage variance	37.6%	21.3%
Number of items in measures	8-items	4-items
Cronbach's Alpha	.89	.78
[Rev] = Reverse coded		
POS = Perceived Organisational Support		

Overall, the EFA confirms that the four items for Security-POS load upon their own factor, as distinct from the eight items for POS. Furthermore, the Security-POS and POS have strong reliabilities and represent diverse constructs. We further tested the differences using CFA in AMOS v 22. Here, we test the two-factor model (determined above) with a comparison one-factor model where all items are combined on a single construct. We followed suggestions by Hair, Anderson, Babin, and Black (2010) and find that the two-factor model is superior to the single-factor model: change  $\chi^2(1)=128.6$  ( $p=.000$ ). We then sought to improve the general construct validity (Campbell & Fiske, 1959) of our Security-POS construct by undertaking tests of both convergent and discriminant validity.

**Convergent Validity.** Evidence of convergent validity is “substantial and significant correlations between different instruments designed to assess a common construct” (Duckworth & Kern, 2011, p. 259). Consequently, we expected the Security-POS construct to be related to outcomes similarly tested in the POS literature. (Cunningham, Preacher, & Banaji, 2001) asserted that such similarities provide confidence and validity to the new measure. Fiske (1971) warns that with new measures, there is often an assumption of convergent validity rather than specific testing. Achieving significant correlations between Security-POS and our variables of interest in this study (job satisfaction, work-life balance and work-family conflict) will provide evidence of convergent validity. Job Satisfaction was measured using 3-items from (Judge, Bono, Erez, & Locke, 2005). A sample question was “Most days I am enthusiastic about my work”. This measure is well validated, including across numerous cultural samples and has adequate reliability ( $\alpha=.71$ ). Work-Life Balance was measured using the 3-item measure by (Haar, 2013). A sample item is “I manage to balance the demands of my work and personal/family life well.” We conducted factor analysis (principal components, varimax rotation) and the three items loaded onto a single factor with eigenvalues greater than one (2.187), accounting for sizeable amounts of the variance (72.9%) and achieving adequate reliability ( $\alpha=.81$ ). Work-Family Conflict was measured using the three items of the time-based conflict dimension scale by (Carlson, Kacmar, & Williams, 2000). A sample item is “My work keeps me from my family activities more than I would like.” The measure had adequate reliability ( $\alpha=.75$ ).

**Discriminant Validity.** (Watson et al., 1995) argue that discriminant validity is necessary with convergent validity. Unlike the similarities that convergent validity seeks to identify; discriminant validity focuses on differences and lack of significant relationships. In effect, it shows that the construct is not so general as to be significantly related to everything. Wahlqvist, Carlsson, Stålhammar, and Wiklund (2002) define discriminant validity as “a low correlation between the measured variables and measures of a different concept” (p. 109). Therefore, we included “Attitude towards Workplace Fun” (Karl, Peluchette, Hall-Indiana, & Harland, 2005; Karl, Peluchette, & Harland, 2007), which should not be significantly correlated to Security-POS, as a test variable for discriminant validity. It was measured by two items, a sample item is: “If my job stopped being fun, I would look for another job”. The measure achieved adequate reliability ( $\alpha = .75$ ). We controlled for demographic factors of gender, age, job tenure, industry and firm size.

#### **6.4.4. Analysis**

Hypothesis 1 tests via the factor analysis, regarding Security-POS being distinct from POS. We also confirmed the convergent validity and discriminant validity via the correlation table. Hypotheses 2 to 4 tested the direct effects of Security-POS to job satisfaction, work-life balance, and work-family conflict, while Hypothesis 5 tested POS as a mediator. In all models, control variables were entered in Step 1. Step 2 had the Security-POS construct while Step 3 held the potential mediator POS. We confirmed mediation effects following the Monte Carlo Method for assessing mediation by Hayes (2013) using PROCESS.

#### **6.4.5. Results**

Descriptive statistics for the study variables are shown in Table 6-4. Table 6-4 shows that Security-POS and POS are moderately correlated ( $r = .35, p < .01$ ); however, this correlation is well below the threshold of concept redundancy that occurs at  $r > .75$  (Morrow, 1983). Furthermore, the EFA and the CFA in SEM (with the outcome variables) also indicated that the two dimensions of support were distinct. Table 6-4 also shows that Security-POS and POS are significantly related to all outcomes (all  $p < .05$ ). The regression models for the direct effects of Security-POS and the potential mediating effects of POS are shown in Table 6-5.

There are two models for each dependent variable. Model 1, where Security-POS only predicts the outcome and then model 2, where an additional Step has POS included as a potential mediator. Table 6-5 shows that Security-POS is significantly related to job satisfaction ( $\beta=.31$ ,  $p<.01$ ) accounting for an additional 9% variance ( $p<.01$ ) over the control variables. However, when POS is included as a mediator we see that POS is significantly related to job satisfaction ( $\beta=.58$ ,  $p<.001$ ) accounting for an additional 26% variance ( $p<.01$ ) over the direct effects of Security-POS. Furthermore, that effect reduces to  $\beta=.08$  and non-significance, providing evidence of full mediation. Security-POS is also significantly related to work-life balance ( $\beta=.24$ ,  $p<.05$ ) accounting for an additional 5% variance ( $p<.05$ ) over the control variables. However, when POS is included as a mediator we see that POS is significantly related to work-life balance ( $\beta=.40$ ,  $p<.001$ ) accounting for an additional 13% variance ( $p<.01$ ), and this fully mediates the direct effects of Security-POS, which reduces to  $\beta=.07$  and non-significance. Finally, Security-POS is significantly related to work-family conflict ( $\beta=-.28$ ,  $p<.01$ ) accounting for an additional 8% variance ( $p<.01$ ) over the control variables. Similar to the other outcomes, when POS is included as a mediator we see that POS is significantly related to work-family conflict ( $\beta=-.34$ ,  $p<.001$ ) accounting for an additional 9% variance ( $p<.01$ ) over the direct effects of Security-POS. Furthermore, that effect reduces to  $\beta=-.15$  and non-significance, providing evidence of full mediation. Combined, the direct effects support Hypotheses 2 to 4, while the significant mediation effects support Hypothesis 5. Monte Carlo test (1,000 iterations) supported the mediation effect of POS. Overall, the Security-POS and POS models accounts for large amounts of variance ( $R^2=.26$  to  $.43$ ).

**Table 6-4. Descriptive Statistics and Correlations**

Variables	M	SD	1	2	3	4	5	6	7	8	9
1. Age	31.7	7.9	--								
2. Job Tenure	3.2	3.6	.48**	--							
3. Industry	1.8	.76	.25**	.11	--						
4. Fun Attitude	3.7	1.0	.01	.09	.07	--					
5. Job Satisfaction	3.4	.83	.02	.06	.08	.14	--				
6. Work-Life Balance	3.0	.98	.13	.09	.12	.07	.40**	--			
7. Work-Family Conflict	3.5	.88	-.01	.01	-.09	.17	-.14	-.52**	--		
8. POS	3.2	.86	-.01	.01	-.05	.13	.51**	.39**	-.37**	--	
9. Security-POS	3.6	.82	.01	-.02	-.02	.09	.19*	.18*	-.20*	.35**	--

N=146. \*p<.05, \*\*p<.01

**Table 6-5. Regression Models for Security-POS towards Outcomes**

<i>Predictors</i>	<b>Outcomes</b>					
	<b>Job Satisfaction</b>		<b>Work-Life Balance</b>		<b>Work-Family Conflict</b>	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
<b>Step 1: Controls</b>						
Age	-.03	-.04	.17	.17	-.02	-.01
Gender	.13	.023	.12	.04	-.05	.03
Job Tenure	-.02	.05	-.11	-.06	.23*	.20*
Industry	.12	.14	.20	.20*	-.18	-.18
Firm Size	-.21*	-.15	.00	.08	.27**	.23*
Change in <i>R</i> <sup>2</sup>	.08	.08	.09	.08	.15*	.13*
<i>F</i> change	1.603	1.448	1.817	1.628	3.131*	2.672*
<b>Step 2: Predictor</b>						
Security-POS	.31**	.08	.24*	.07	-.28**	-.15
Change in <i>R</i> <sup>2</sup>	.09**	.09**	.05*	.05*	.08**	.08**
<i>F</i> change	9.790**	9.630**	5.661*	5.392*	8.974**	8.668**
<b>Step 3: Mediator (models 2 only)</b>						
POS		.58***		.40***		-.34**
Change in <i>R</i> <sup>2</sup>		.26***		.13***		.09**
<i>F</i> change		39.915***		15.286***		11.668**
<i>Total F</i>	3.098***	9.323***	2.535*	4.493***	4.333**	5.373***
Overall <i>R</i> <sup>2</sup>	.17	.43	.15	.26	.22	.30
Adjusted <i>R</i> <sup>2</sup>	.12	.38	.09	.21	.17	.24

Notes: Values are standardized beta coefficients. \**p*< .05, \*\**p*< .01, \*\*\**p*< .001  
 POS= Perceived Organisational Support

#### **6.4.6. Summary**

In study 2, we empirically tested and confirmed that while Security-POS and POS are distinct, it appears that Security-POS is simply an important component of POS. Thus, an organisation that provides strong security and safety towards their employees, ultimately signals that they care about the well-being of their employees, enhancing their POS. POS traditionally has shown to enhance job satisfaction and work-life balance, and reduce work-family conflict (Kurtessis et al., 2015) and these were supported in the present study 2. Furthermore, while Security-POS was related to all these outcomes it was fully mediated by POS, indicating a process where by Security-POS enhances POS, which in turn has beneficial effects on employee outcomes.

### **6. 5. Discussion**

The focus of the present study was to explore POS in a non-Western setting where employees face terrorism on a daily basis, and have done so for years. We were interested in understanding how POS operates and whether the challenging context of Pakistan provides a useful backdrop for broadening our understanding of OST (Eisenberger et al., 1986). Ultimately, we found strong support across our two studies for organisational support. The terrorism setting clearly influenced the respondents' views, which was evident with the strong focus on security measures to be perceived as a part of organisational support.

The qualitative inquiry highlighted that safety and security is given so much importance that it overrides the importance of other forms of support; this is important because no other study has highlighted this aspect in such a context. Our survey-based study showed that employees living under constant terrorism do require POS, but the nature of POS is different from what is currently established in (safer) Western contexts. Employees being concerned for their own safety see security focused support from their organisation as being part of a wider support for their well-being. Thus, Security-POS appears to act as an antecedent of POS which theoretically makes sense in the context of OST and specifically POS, which has a broad all-encompassing well-being focus.

Our findings of organisational support are also different from other studies done in the context of terrorism. Bader, Berg, et al. (2015) looked at POS in terrorism endangered countries

and the case of expatriates' family related safety concerns, and found POS to reduce the negative effects. The present study takes this even further using the context by exploring POS and terrorism amongst local employees, and extends the focus to Security-POS. Bader and Berg (2014) proposed anti-stress programmes may help expatriates in their assignments living in terrorism endangered country. However, in our study, no locals asked for an anti-stress programme specifically related with terrorism.

Indeed, our study was unique; we did not automatically assume OST would be applicable as is, in such a context. We took a step back to explore how the context might influence employee perceptions of support, for which we conducted qualitative inquiry. Based on qualitative data, we developed a context-specific instrument to measure the perceptions around Security-POS. Thus we were able to expand the theory of POS to include Security-POS. Importantly, we did not ignore the existing POS instrument to ensure we were responding to the strong support that POS enjoys in the literature. We provide evidence that organisational support might be extended to include security from terrorism. Overall, this helped provide researchers a deeper understanding of OST, and enables practitioners to provide support and work effectively in organisations.

Understanding the role of POS and Security-POS in the case of employees living under ongoing terrorism opens future avenues for research and application. For instance, knowing the likelihood of Post-traumatic stress disorder (PTSD) in cases of ongoing terrorism (Hobfoll et al., 2008), a sense of protection might help employees feel less stressed and conserve their resources thus reduce the chances of trauma. Security-POS and POS could also be researched from the theoretical perspective of social exchange theory (Emerson, 1976), the norms of reciprocity and conservation of resources (Hobfoll, 1989). Further exploration of Security-POS and POS on mental health outcomes is especially encouraged. This will have implication for both theory and practice.

## **6. 6.        Limitations**

Our paper has some limitations. Our samples are modest, and the quantitative sample is limited by self-reporting (Podsakoff & Organ, 1986) and cross-sectional in nature. We acknowledge common method variance as another limitation of the quantitative study (Podsakoff,

MacKenzie, Lee, & Podsakoff, 2003; Podsakoff, MacKenzie, & Podsakoff, 2012), however the context makes physical data collection dangerous and potentially life threatening. Given the anonymous nature of survey responses we were unable to link this to other-sourced data like supervisor-rated performance. A large part of the population working as unskilled labour or with lower education in agricultural sectors was not tapped because of the researcher's inability to access them via electronic contact. However, having the two studies pointing towards the same findings provide confidence in the findings. Further research is needed to establish the generalisability of our findings.

## **6. 7. Conclusion**

This study explored organisational support for employees in terrorism-affected Pakistan. Our purpose was to find, inform, and then confirm POS in the context of ongoing terrorism. First in qualitative study we explored the nature of organisational support. Second, informed by the contextual data, we developed our new construct of Security-POS. Third, our quantitative study confirmed the Security-POS construct was distinct from POS and appeared to play an important antecedent role towards a number of outcomes. Our study contributes to the OST literature and practice. This paper encourages research that explores and tests Western constructs in the challenging context of terrorism-affected countries such as Pakistan.

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## **Chapter 7**

**Job Stress and Post Traumatic Stress Disorder on Job Outcomes:**

**The Mediating Effects of Psychological Capital**



**MASSEY UNIVERSITY**  
**GRADUATE RESEARCH SCHOOL**

**Statement of contribution to Doctoral Thesis containing publications**

(To appear at the end of each thesis chapter/section/appendix submitted as an article/paper or collected as an appendix at the end of the thesis)

We, the candidate and the candidate's Principal Supervisor, certify that all co-authors have consented to their work being included in the thesis and they have accepted the candidate's contribution as indicated below in the *Statement of Originality*.

**Name of Candidate: Fatima Junaid**

**Name/Title of Principal Supervisor: Professor Jane Parker**

**Name of Presented (under review) Research Output and full reference:**

Junaid, F., & Haar, J. M. 2016. *Job stress and PTSD on job outcomes: The mediating effects of psychological capital*. Paper presented at 5th Aotearoa New Zealand Organisational Psychology and Organisational Behaviour Conference in November 2016, at Auckland University of Technology, New Zealand.

**In which Chapter is the Published Work: 7**

Please indicate either:

- The percentage of the Published Work that was contributed by the candidate: and / or
- Describe the contribution that the candidate has made to the Published Work:

This paper is based on the third (quantitative) study findings. It looks at the effects of job stress and PTSD, on job satisfaction and employee turnover intentions. It further addresses the role of Psychological Capital as a mediator. I was responsible for designing the survey. My supervisor

then approved that it was correctly designed. I conducted the analyses and drafted the paper, and improved it with the guidance of my supervisors. It was then accepted and presented at 5th Aotearoa New Zealand Organisational Psychology and Organisational Behaviour Conference in November 2016, at Auckland University of Technology. It was one of the finalists for ‘Professor O’Driscoll Best paper award’. With the feedback from the conference and my supervisors, I further refined, currently it is under review with *International Journal of Human Resource Management*.

*Fatima Junaid*

August 5<sup>th</sup> 2017

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Candidate’s Signature

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Date

*Jane Parker*

August 5<sup>th</sup> 2017

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Principal Supervisor’s signature

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Date

*Jarrod Haer*

August 5<sup>th</sup> 2017

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Co-author’s Signature

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Date

## Chapter 7

### **Job Stress and Post Traumatic Stress Disorder on Job Outcomes: The Mediating Effects of Psychological Capital**

#### **Abstract**

Literature on job stress is well established, with hindrance stressors highlighted as being typically detrimental and challenge stressors beneficial to employee consequences. However, a number of gaps persist in the literature, especially around context. The broad focus on western settings has excluded unique contexts such as employees living under ongoing terrorism and related trauma, yet these contextual non-work stressors may be significant. Drawing on Conservation of Resources and Positive Organisational Behaviour theories, this study tests both hindrance and challenge stressors as predictors of job satisfaction and turnover intentions with 416 Pakistan employees, and addresses living under terrorism using post traumatic stressor disorder (PTSD) as a moderator. Hindrance stressors were found to be detrimental to the outcomes but, unlike the majority of extant findings, challenge stressors did not have a beneficial influence. PTSD had significant but small direct effects on outcomes and significant interaction effects with stressors, typically exacerbating the detrimental influences. Finally, we explored the potential for positive psychology to manage these relationships and tested psychological capital (PsyCap) as a mediator. PsyCap was found to predict both outcomes directly, accounting for large amounts of variance. It partially mediated the effects of hindrance stressors, while fully mediating the effects of PTSD.

Keywords: Stressors; job outcomes; PTSD; PsyCap; moderation; mediation; Pakistan.

#### **7.1 Introduction**

To understand employee experiences at work, it is necessary to consider a full range of experiences (LePine, LePine, & Saul, 2007). One such factor is living under ongoing terrorism. With growing threats of terrorism globally, there is limited research in the management and social sciences on the effects of terrorism on workplaces, which tends to focus mainly on one-off

incidents (DiMaggio & Galea, 2006; Nissen, Birkeland Nielsen, Solberg, Bang Hansen, & Heir, 2015), such as the 9/11 attacks (Ryan, West, & Carr, 2003; Woods, 2011). Compared to the exposure to one-off incidents, employees who live under the constant threat of terrorism might be affected differently (Hobfoll et al., 2009), but outside Israel, those effects are largely unknown. Our study responds to several calls, including the need to research non-western contexts, terrorism and hostile environments

To address these gaps, the present study uses the Conservation of Resources (CoR) (Hobfoll, 1989) and Positive Organisational Behaviour (POB) theories (Luthans, Avolio, Avey, & Norman, 2007; Luthans & Youssef, 2007) to explain our approach. Based on these theories, we discuss the context of working while living under ongoing terrorism. We argue that hindrance stressors, coupled with the stress of terrorism, will take a toll and deplete employees' finite resources, in turn increasing job dissatisfaction and intentions to leave. Alternatively, the beneficial effects of challenge stressors will be reduced by the stress of terrorism. We integrate POB into our approach on the premise that Psychological Capital (PsyCap) may play an important role when stressors deplete the psychological resources of those working, while living under ongoing terrorism. To understand the effects of the context on employees, this study is conducted in Pakistan, the third worst terrorism-affected country in the world (Institute of Economics and Peace, 2014).

The paper makes four contributions. First, we explore the relationship of challenge and hindrance stressors with job satisfaction and turnover intention, which, despite being widely studied, have not been explored in Pakistan. Second, we capture the complex external factor of ongoing terrorism and how this may influence employee outcomes by including PTSD as a moderator of the stressor-outcome relationships. Third, with PsyCap, we provide insights on thriving in the workplace within contexts where stressors and terrorism may have detrimental influences on job outcomes. Finally, we develop CoR theory by using factors from distinct literature in a sample of Pakistani employees living under extreme circumstances to understand the role of resources in such settings.

## **7.2 Conservation of Resources (CoR) Theory**

CoR theory (Hobfoll, 1989, 2002) is a useful lens for understanding how job stressors influence job outcomes. CoR theory is an integrated model of stress based on the use of resources, and highlights how employees acquire new, and maintain existing, resources. Hobfoll (2001) defined resources as “those objects, personal characteristics, conditions, or energies that are valued in their own right, or that are valued because they act as conduits to the achievement or protection of valued resources” (p. 339). He asserts that resources could be many factors including psychological resources, or simply time – especially if they benefit an employee. In workplaces, Alarcon (2011) notes that these resources are beneficial and can enhance performance, while a lack or depletion of resources can cause stress. Stress has often been associated with negative outcomes. However, over the last two decades, contemporary research suggests that not all stress is negative (Cavanaugh, Boswell, Roehling, & Boudreau, 2000). Below we first discuss the positive and negative job stressors and their consequently, detailing their influence on resources and our hypotheses.

## **7.3 Job Stressors**

If stressors are appraised as depleting existing resources, then they are considered to be hindrance stressors (Cavanaugh et al., 2000), for example, organisational politics or excessive workloads. These stressors are detrimental, leading to adverse effects including lower job satisfaction (Lepine, Podsakoff & Lepine, 2005). Alternatively, factors seen as stressful yet rewarding and which might not have adverse outcomes are known as challenge stressors (Cavanaugh et al., 2000). They are constructive and help build resources, leading to employees’ enhanced satisfaction with their job (Haar, 2006), and include having important responsibilities and working on a number of projects.

Notwithstanding this, we recognize that the empirical evidence supporting the beneficial and detrimental influences of challenge and hindrance stressors is equivocal. Arguably, situations are not ‘black or white’ and challenge and hindrance stressors do not constitute two ends of a continuum nor are they mutually exclusive (Webster, Beehr & Love, 2011). Webster et al. (2011) reason that employees may appraise a stressor as both a challenge and a hindrance. For example,

in CoR theory, Hobfoll (2001) identified ‘time’ in several ways as an important resource. Work overload might erode time resources, leaving an employee with less quality time for his or her job, or to spend at home. At the same time, if the work is challenging, the employee may gain a sense of accomplishment from the work responsibilities and come home satisfied about spending quality time there, and might also be a resource builder via the challenge.

Lepine et al. (2005) meta-analysis found that challenge stressors – positively, and hindrance stressors – negatively, influenced motivations and performance. There was no such distinction towards anxiety, depression and job burnout; the influence was positive from both stressors. Thus, while challenge stressors can enhance motivation and performance, they can also be detrimental to well-being. Under CoR theory, this suggests that the depletion of resources is uniformly detrimental for well-being, but the influence on satisfaction with the job might be unique due to characteristics inherent in the work factor, specifically around its challenging nature. Further research could help clarify the extent to which challenge stressors benefit employees. We now discuss challenge and hindrance stressors; and their possible relation with two job outcomes (job satisfaction and turnover intentions), with our rationale for the choice of the outcomes, and nature of the relationship.

### ***7.3.1. Job Consequences of Stressors and Hypotheses***

Our premise for selecting these outcomes is relevance and contextual suitability for the study. We argue that job and terrorism stressors will deplete employees’ existing psychological resources, thus leaving employees with inadequate resources to do the job well or feel satisfied with work. Being a part of well-being, yet a work outcome, job satisfaction is affected by stressors and extra-organisational stressors. Similarly, employees living under ongoing terrorism, while working in their jobs, might feel too stressed and think of quitting. We argue that turnover intentions are the most proximate estimate of turnover (Tett & Meyer, 1993). Thus, these outcomes will enable us to capture the effects of the stressors on employees.

Locke (1969) defines job satisfaction as “a pleasurable emotional state resulting from employees’ favorable appraisal of their job, achievements, and job-related value” (p. 309) and job

satisfaction is a common focus of stressor research. Cavanaugh et al. (2000) found hindrance stressors were negatively related and challenge stressors positively related to job satisfaction.

Turnover intention is when employees often think about leaving their jobs (Kelloway, Gottlieb, & Barham, 1999). In their meta-analysis, Podsakoff, LePine, and LePine (2007) stated that challenge and hindrance stressors should be distinguished from each other as these are differentially associated with job attitudes. With regards to job satisfaction, their meta-analysis tested 99 samples (over 25,000 employees) and found strong support for hindrance stressors being negatively and challenge stressors being positively related to job satisfaction. Furthermore, the study tested 79 samples (over 22,000 employees), and found strong support for hindrance stressors being positively and challenge stressors being negatively related to turnover intentions. These differentiated effects have been supported outside the US, including with unusual employee groups, such as Maori, the New Zealand indigenous people (Hollebeek & Haar, 2012). Consequently, we hypothesize similar relationships for our sample of Pakistani employees:

*Hypothesis 1: (a) Challenge stressors will be positively related, and (b) hindrance stressors will be negatively related, to job satisfaction.*

*Hypothesis 2: (a) Challenge stressors will be negatively related, and (b) hindrance stressors will be positively related, to turnover intentions.*

### **7.3.2. Extra-Ordinary Stressors and Hypotheses**

Extra-ordinary stressors, or life-threatening events, are defined as those stressors which are beyond the normal coping abilities of a person, and can lead to negative behavioral and emotional consequences (Vasterling, Brailey, Constans, & Sutker, 1998). Employees living under ongoing terrorism are likely to be exposed to life-threatening terrorism events. Extreme acts of terrorism can cause trauma and lead to PTSD (Shalev & Freedman, 2005; Weinberg, Besser, Campeas, Shvil, & Neria, 2012). PTSD is a form of disorder caused by experiencing extreme levels of stress. Being a dysfunctional form of stress, it can have intense consequences (National Institute for Health and Clinical Excellence, 2005). Yehuda, et al. (2016) explain that traumatic events can have life-long effects.

Our study uses PTSD as a lens through which to capture the stress of living under ongoing terrorism. Limited research exists regarding the effects of ongoing exposure to terrorism on employees (James, 2011; Toker, Laurence, & Fried, 2015), with the exception of research conducted in Israel (Besser & Neria, 2009; Bleich, Gelkopf, & Solomon, 2003; Hobfoll et al., 2008; Hobfoll et al., 2009; Romanov, Zussman, & Zussman, 2012; Shalev, et al., 2006; Waxman, 2011; Weinberg et al., 2012) and on expatriates (e.g. Bader, Reade & Froese, 2016; Bader, Berg, & Holtbrügge, 2015; Bader & Schuster, 2015).

We note that the foci of these studies differ to the Pakistani context. First, Pakistan has had ongoing terrorism for more than a decade and a cessation does not look imminent. Furthermore, unlike war, ongoing terrorism is faceless and indiscriminate – with a faceless enemy. Second, studies on expatriates are different because expatriates have the choice of: (1) not bringing their family to a dangerous country, and (2) exiting that country and terminating their contract (Bader et al., 2015; Bader & Schuster, 2015). However, local employees such as those in our Pakistan sample may not have such options. In addition, expatriates may differ to locals in their attachment level to the host country. Such factors might influence how one perceives and is affected by PTSD. To our knowledge, no study has looked at job stressors (challenge and hindrance) and PTSD and its influence on job outcomes. Pakistan provides a unique context with ongoing terrorism, with an average death toll due to terrorism, of 2,000 people annually (United Nations, 2012). People from various backgrounds and ethnicities have been the targets of indiscriminant terrorism in Pakistan (South Asia Terrorism Portal, 2016), including employees and their workplaces.

Research is limited in determining the impacts of PTSD over time (Shalev & Freedman, 2005; Shalev et al., 2006). Thus, the spectrum of implications of living under ongoing terrorism (Hobfoll et al., 2008), especially in workplaces, are unknown. The importance of context cannot be underestimated in research (Johns, 2006) and we argue that conditions of ongoing terrorism needs further exploration, particularly given that research of single incident terrorism has found that terrorism can cause stress and PTSD (Howie, 2007), which may lead to detrimental job outcomes (e.g. Toker et al., 2015).

While PTSD is typically detrimental, and we expect this in our context, it may be less invasive than job stressors. Our reasoning for this is, that when communities are continually exposed to terrorism, they try to find stability within the instability (Shalev & Errera, 2009). People look for patterns and try to find way to stability, this may at means that people accept terrorism as a constant factor that is beyond control, and expect such incidence to happen. Thus, the nature of ongoing terrorism might lead people to conserve their resources by treating it as a constant (Bongar, Brown, Beutler, Breckenridge, & Zimbardo, 2007). In doing so it is likely that people try to focus on finding what is normal, routine and predictable, and treat the instability as a constant. This brings job stressors to the forefront. We argue using the above two points. First, job stressors as they might fluctuate more in relation to the workplace, yet are something that people relate with as normal, than ongoing terrorism and related PTSD. Second, job stressors may something an individual employee can control, whereas terrorism is beyond a single person's control, therefore they may treat ongoing terrorism as uncontrollable but a constant factor. Hence, we hypothesize that PTSD will have a direct and detrimental effect on job outcomes, but that these effects will be smaller than the influence of job stressors.

*Hypothesis 3: PTSD will be (a) negatively related to job satisfaction and (b) positively related to turnover intentions, at levels lower than job stressors.*

In addition to the direct effects of PTSD, we test the potential moderating effects of PTSD on job stressors. Researchers have argued that the relationships of challenge and hindrance stressors with employee outcomes often exist in the presence of moderators or mediators (Webster et al., 2011; Yao, Jamal, & Demerouti, 2015). LePine et al. (2007) advocated the inclusion of work and non-work factors to better understand the influence of job stressors on outcomes. We contend that PTSD provides both an unusual context and a real non-work factor, worthy of examination, because an employee living under ongoing terrorism may constantly try to balance the stressors of work and beyond. Under CoR theory, PTSD would further drain resources, exacerbating the detrimental influence of hindrance stressors, leading to more severe detrimental effects. Similarly, while challenge stressors are expected to be beneficial to job outcomes

(Podsakoff et al., 2007), if the employee is suffering from PTSD, this might confound otherwise positive effects, resulting in an ultimately detrimental influence from challenge stressors.

Employees working under ongoing terrorism may suffer from the stress of constant fear and work in a state of hyper-vigilance (Friedman, Resick, Bryant, & Brewin, 2011). Alternatively, they might regulate themselves based on the constant threat, which becomes the 'new normal' (Shalev and Errera, 2009). We hypothesize that the higher PTSD will exacerbate the detrimental influence of hindrance stressors, leading to lower job satisfaction and higher turnover intentions. Furthermore, we suggest that the effectiveness of challenge stressors is likely to be reduced for those with high PTSD. In effect, PTSD will buffer the positive gains of challenge stressors, leading to reduced gains in job satisfaction and turnover intention, leading to our moderation hypotheses:

*Hypothesis 4: PTSD will moderate the relationships between challenge stressors and job outcomes, reducing the beneficial effects of challenge stressors.*

*Hypothesis 5: PTSD will moderate the relationships between hindrance stressors and job outcomes, exacerbating the detrimental effects of hindrance stressors.*

### **7.3.3. Mediating Effects of Psychological Capital**

Challenge and hindrance stressors may have differential effects on outcomes, but being stressors, they are associated with experience of an imbalance in the emotional and psychological demands versus the available via emotional and psychological resources (Crawford, LePine, & Rich, 2010; Lepine et al., 2005). CoR theory further highlights that, for any individual, resources are finite and prolonged use would deplete them (Dawson, O'Brien, & Beehr, 2016). With stressors taxing material and immaterial resources (e.g. financial, psychological, social) (Hobfoll, Tracy, & Galea, 2006), it is likely that long-term exposure to terrorism will constantly deplete the emotional and psychological strength (resources) of employees working in Pakistan.

We discuss four characteristics - hope, efficacy, resilience and optimism - that provide psychological strength to cope with the resource loss and stress (Avey, Luthans, & Youssef, 2010). This is a widely-accepted taxonomy for psychological resources called PsyCap (Luthans,

Youssef-Morgan, & Avolio, 2015) available for a person to deal with adversity. Luthans et al. (2015) defined PsyCap thus:

an individual's positive psychological state of development and is characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goal and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success (p. 2).

Luthans et al. (2007) stated that employees with higher PsyCap are “more likely to ‘weather the storm’ of the type of dynamic, global environmental contexts confronting most organizations today better than their counterparts with lower PsyCap” (p. 568). Avey, Reichard, Luthans and Mhatre (2011) highlight that, under CoR theory, PsyCap is known to help improve employee well-being over time. Their meta-analysis showed that PsyCap is positively related to employee behaviours including increased job satisfaction and decreased turnover intentions. Similarly, Roche, Haar and Luthans (2014) found that PsyCap was consistently related to several well-being outcomes across a number of samples.

Several researches show that PTSD, trauma and exposure to terrorism can lead to depletion of psychological resources. Studies also point that psychological capital can reduce the adverse effects of exposure to trauma thus improve mental health. However, research has rarely addressed how exposure to ongoing terrorism and trauma may reduce the existing psychological resources? Neither has it addressed that how would this effect the employees? However, because stress of terrorism (being ongoing) is something that takes a toll on people, therefore it is more suitable to treat it as a mediator and not moderator.

We operationalized PsyCap using Luthans and colleagues' definition which is state like, which means that it can be built or depleted. So, when employees under constant stress of terrorism, it is likely to deplete the resource (Lambert, 2000), and thus we argue that it is a mediator. Bongar et al. explain that “Terrorism is not about war in any way....it is invasion of our minds” (p.358). Further they state that “...such acts are intended to create a fearful state of mind

in an audience far wider than the immediate victims. In fact, terrorism is aimed at non-combatants with the objective of deliberate creation of dread” (p. 400).

Inferring from the above when terrorism is so pronounced; people expect it anywhere and anytime. This can create a sense of fear and vulnerability, and distress and anxiety, that one may face a loss. It can also lead to confusion and helplessness, because one doesn't know who may be targeted and by whom. This can take a toll on one's psychological capital. The ongoing nature of terrorism may make one lose hope. Constant fear and anxiety may reduce resilience. Even the optimistic may start feeling that it is beyond reach and control. The lack of control may reduce self-efficacy. All these factors can reduce the psychological capital.

The reason for using this 'state-like' operationalization was because the purpose of the thesis was to determine that if PsyCap can play a role in dealing with the stressors in terrorism then organisations should be informed, and programs may be developed to build PsyCap. A win-win tool for the organisations.

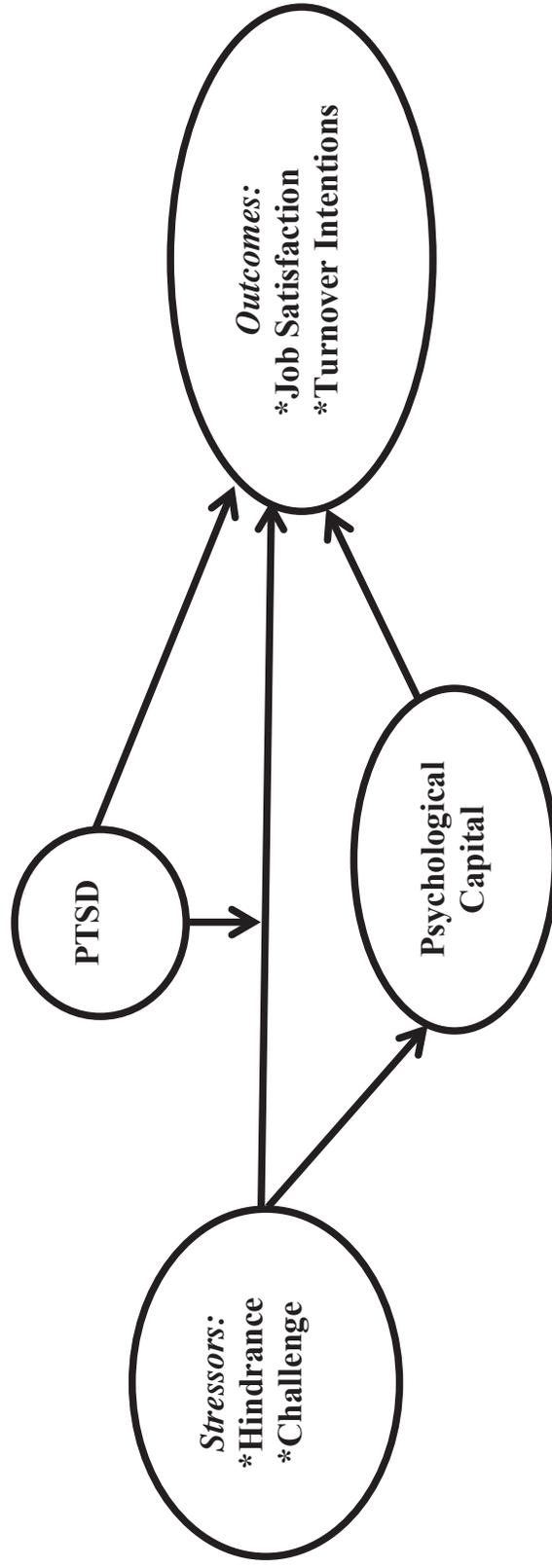
Summarizing the above, we suggest that the detrimental stressors (hindrance and PTSD) will deplete while challenge stressors build resources; PsyCap is likely to mediate these effects towards job outcomes. There is support for some of the PsyCap components benefiting in the case of trauma (Burke, 2012; Byron & Peterson, 2002). For example, research in Israel shows people's resilience in terms of recovering after the period of Intifada (Palestinian uprising against Israel - Hobfoll et al., 2008; Waxman, 2011). However, despite calls (Junaid & Haar, 2015); there has been no further exploration of the role of PsyCap for employees working under on-going terrorism. We suggest that PsyCap will be a resource repository for employees, and mediate the detrimental and beneficial effects of stressors. Our final hypotheses are:

*Hypothesis 6: PsyCap will be related to job satisfaction, and mediate the influence of (a) challenge stressors, (b) hindrance stressors and (c) PTSD.*

*Hypothesis 7: PsyCap will be negatively related to turnover intentions, and mediate the influence of (a) challenge stressors, (b) hindrance stressors and (c) PTSD.*

Our study model is presented in figure 7-1.

Figure 7-1 Study Model for hindrance and challenge stressors, PTSD, PsyCap and employee outcomes



## 7.4 Method

### 7.4.1. Sample and Procedures

Data were collected in Pakistan, including the worst-affected Khyber PakhtoonKhawa and Federally Administered Tribal Areas, during June-August 2016. Purposeful sampling via snowballing was undertaken to attract respondents (Coyne, 1997) for two reasons. First, the University ethics committee required that only those people without an immediate loss in the last month (preferably two) should be contacted. Second, as per NATO guidelines (Williams et al., 2009), due to the sensitive nature of the region, caution and diligence was needed. The first author used her academic networks in the region to contact 300 respondents who were then asked to forward the survey to 2-3 contacts. Overall, some 800 employees were contacted, with 547 people visiting the online survey and 416 respondents fully completing the survey (a response rate of around 52%).

Participants' average age was 32 years (SD=7.4 years), with 51% married; 66% male; and 65% non-parents. Respondents were highly educated (56% held a master's degree, 27% an above master's degree and 13% a university degree). The remainder had high school qualification equivalents (4%). By sector, just over half were in the private sector (52%), followed by the public sector (36%) and not-for-profit (12%).

### 7.4.2. Measures

Challenge and Hindrance Stressors were measured using the 11-item scale developed by Cavanaugh et al. (2000). Questions followed the stem "Things that cause you stress..." and were coded 1=no stress, 5=great deal of stress. Sample questions included: "The number of projects and/or assignments I have" (challenge stressor,  $\alpha=.86$ ), and "The amount of red tape I need to go through to get my job done" (hindrance stressor,  $\alpha=.73$ ).

PTSD was measured using the established 17-item scale by (American Psychiatric Association, 2013; NICE, 2005), coded 1=not at all, 5=extremely, which looks into re-experiencing symptoms, avoidance of reminders of the trauma, hyper-arousal and emotional numbing. Respondents were asked to respond to questions in relation to terrorism and no other

trauma, with a sample item being “Repeated, disturbing memories, thoughts, or images of a stressful experience from the past?” This measure is widely-used in the literature and this had excellent reliability ( $\alpha=.95$ ).

PsyCap was measured using the PCQ-12 (Avey et al., 2011) coded 1=strongly disagree, 5=strongly agree. The PCQ-12 has four sub-scales: (1) Hope (4-items), (2) Efficacy (3-items), (3) Resilience (3-items) and (4) Optimism (2-items). The psychometric properties of the short PsyCap construct has been established (Luthans et al., 2015; Roche, Haar, & Luthans, 2014) Sample items include: “If I should find myself in a jam at work, I could think of many ways to get out of it” (hope), “I feel confident helping to set targets/goals in my work area” (efficacy), “I can get through difficult times at work because I've experienced difficulty before” (resiliency), and “I'm optimistic about what will happen to me in the future as it pertains to work” (optimism). We followed the literature by combining the four dimensions into a single PsyCap construct (Avey et al., 2011) and this had excellent reliability ( $\alpha=.93$ ).

Job Satisfaction was measured using four items from (Judge, Bono, Erez & Locke, 2005), coded 1=strongly disagree, 5=strongly agree. A sample question was “Most days I am enthusiastic about my work” ( $\alpha=.80$ ).

Turnover Intentions was measured using a 4-item measure by (Kelloway et al., 1999), coded 1=strongly disagree, 5=strongly agree. A sample question was “I intend to ask people about new job opportunities” ( $\alpha=.90$ ).

Three control variables were used: age (years), marital status (1=married/de facto, 0=single) and parental status (1=parent, 0=non-parent). These demographic variables have been used in studies exploring stressors, job satisfaction and turnover intentions (Haar, Roche, & Taylor, 2012; Haar & Roche, 2010).

## **7.5 Analysis**

To examine the direct effects of challenge and hindrance stressors on job satisfaction and turnover intentions (Hypotheses 1 and 2), the direct effects of PTSD (Hypothesis 3), the potential moderating effects of PTSD (Hypotheses 4 and 5), and the potentially mediating effects of PsyCap

(Hypotheses 6 and 7), separate hierarchical regression analysis were conducted in SPSS v24. Control variables were entered in Step 1. The two stressors (challenge and hindrance) were entered in Step 2. The potential moderator (PTSD) was entered in Step 3, and the interaction effects (stressors multiplied by PTSD) were entered in Step 4. Step 5 held the mediator (PsyCap). Following Aiken and West's (1991) recommendation, the centering procedure was used where interaction variables (stressors and PTSD) are z-scored. Consistent with Cohen and Cohen (1975), regression coefficients for the control effects were obtained from Step 1 in each analysis, predictor effects were obtained from Step 2, moderator effects from Step 3, interaction effects from Step 4, and mediator effects from Step 5. For mediation, this was confirmed using the Monte Carlo method using bootstrapping in PROCESS (Hayes, 2013).

## **7.6 Results**

Table 7-1 shows descriptive statistics for all variables.

**Table 7-1 Correlations and Descriptive Statistics of the Study Variables**

	Mean	SD	1	2	3	4	5	6	7
1. Age	32.0	7.4	--						
2. Hindrance Stressors	3.0	.92	-.19**	--					
3. Challenge Stressors	2.9	.83	-.02	.31**	--				
4. PTSD	2.2	.93	-.25**	.29**	.16**	--			
5. PsyCap	3.8	.50	.18**	-.25**	-.03	-.20**	--		
6. Job Satisfaction	3.5	.79	.21**	-.34**	-.21**	-.25**	.62**	--	
7. Turnover Intentions	3.0	1.1	-.24**	.35**	.18**	.25**	-.42**	-.67**	--

N=416, \*p<.05, \*\*p<.01

Hindrance stressors were significantly correlated to challenge stressors ( $r=.31, p<.01$ ), PTSD ( $r=.29, p<.01$ ), PsyCap ( $r=-.25, p<.01$ ), job satisfaction ( $r=-.34, p<.01$ ), and turnover intentions ( $r=.35, p<.01$ ). Challenge stressors were significantly correlated to PTSD ( $r=.16, p<.01$ ), job satisfaction ( $r=-.21, p<.01$ ), and turnover intentions ( $r=.18, p<.01$ ). PTSD was significantly correlated to PsyCap ( $r=-.20, p<.01$ ), job satisfaction ( $r=-.25, p<.01$ ), and turnover intentions ( $r=.25, p<.01$ ), while PsyCap was significantly correlated to job satisfaction ( $r=.62, p<.01$ ), and turnover intentions ( $r=-.42, p<.01$ ). Finally, job satisfaction and turnover intentions were significantly correlated with each other ( $r=-.67, p<.01$ ).

Table 7-2 shows the results of the regressions for Hypotheses 1 to 6. Hindrance stressors were significantly and negatively related to job satisfaction ( $\beta=-.33, p<.001$ ), and significantly and positively related to turnover intentions ( $\beta=.29, p<.001$ ), which supports Hypotheses 1b and 2b. However, there was no support for Hypotheses 1a and 2a, as challenge stressors are not significantly related to either outcome. PTSD was significantly and negatively related to job satisfaction ( $\beta=-.14, p<.01$ ), and significantly and positively related to turnover intentions ( $\beta=.12, p<.05$ ), which supports Hypotheses 3a and 3b. While the stressors accounted for 12% of the variance to job satisfaction ( $p<.001$ ) and 10% to turnover intentions ( $p<.001$ ), the influence of PTSD was modest at 2% ( $p<.05$ ) to job satisfaction and 1% ( $p<.05$ ) to turnover intentions. This supports Hypothesis 3 around PTSD being less influential on job outcomes than job stressors.

PTSD had a significant interaction effect with hindrance stressors towards job satisfaction ( $\beta=-.09, p<.05$ ) and turnover intentions ( $\beta=.11, p<.05$ ), while PTSD also interacted significantly with challenge stressors towards turnover intentions ( $\beta=-.10, p<.05$ ). To facilitate interpretation of the interaction effects for PTSD, plots of the interactions are presented below (see figure 7-2, 7-3, and 7-4).

**Table 7-2 Hierarchical Moderated Regression Analysis for Job Satisfaction and Turnover Intentions**

Variables	Job Satisfaction					Turnover Intentions				
	Step 1	Step 2	Step 3	Step 4	Step 5	Step 1	Step 2	Step 3	Step 4	Step 5
<i>Controls</i>										
Age	.20**	.14*	.11	.11	.05	-.20**	-.15*	-.12	-.13*	-.09
Marital Status	-.01	.02	.02	.02	.06	.01	-.02	-.02	-.02	-.03
Parental Status	.06	.04	.03	.03	-.05	-.04	-.02	-.01	-.00	.04
<i>Predictors:</i>										
Hindrance Stressors		-.33‡	-.29‡	-.30‡	-.17‡		.29‡	.26‡	.27‡	.19‡
Challenge Stressors		-.06	-.05	-.05	-.11**		.07	.06	.06	.10*
<i>Moderator</i>										
PTSD			-.14**	-.12*	-.04			.12*	.11*	.05
<i>Interaction Effect</i>										
Hindrance Stressors x PTSD				-.09*	-.03				.11*	.07
Challenge Stressors x PTSD				.04	.00				-.10*	-.06
<i>Mediator</i>										
PsyCap					.57‡					-.34‡
R <sup>2</sup> change	.05**	.12‡	.02*	.01	.29‡	.05**	.10‡	.01*	.01*	.10‡
Total R <sup>2</sup>	.05	.17	.19	.19	.47	.05	.14	.15	.16	.26
Adjusted R <sup>2</sup>	.04	.16	.17	.17	.46	.04	.13	.13	.14	.24
F Statistic	5.259**	12.307‡	11.541‡	9.060‡	28.881‡	5.115**	10.583‡	9.695‡	8.131‡	11.550‡

\*p<.05, \*\*p<.01, ‡p<.001 Standardized regression coefficients.

Figure 7-2 Interaction Effects of PTSD on Hindrance Stressors with Job Satisfaction as the Dependent Variable.

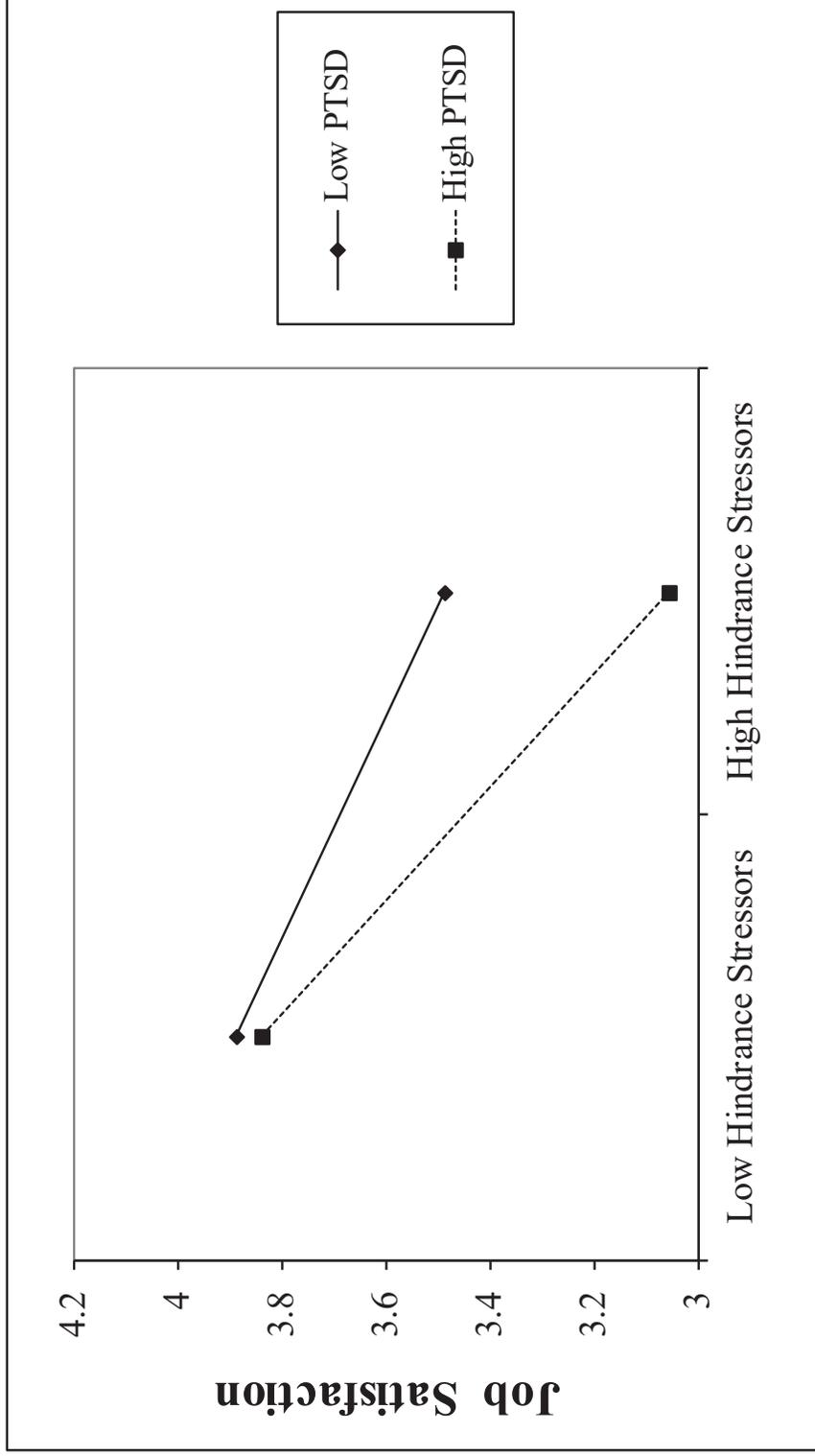


Figure 7-3 Interaction Effects of PTSD on Hindrance Stressors with Turnover Intentions as the Dependent Variable.

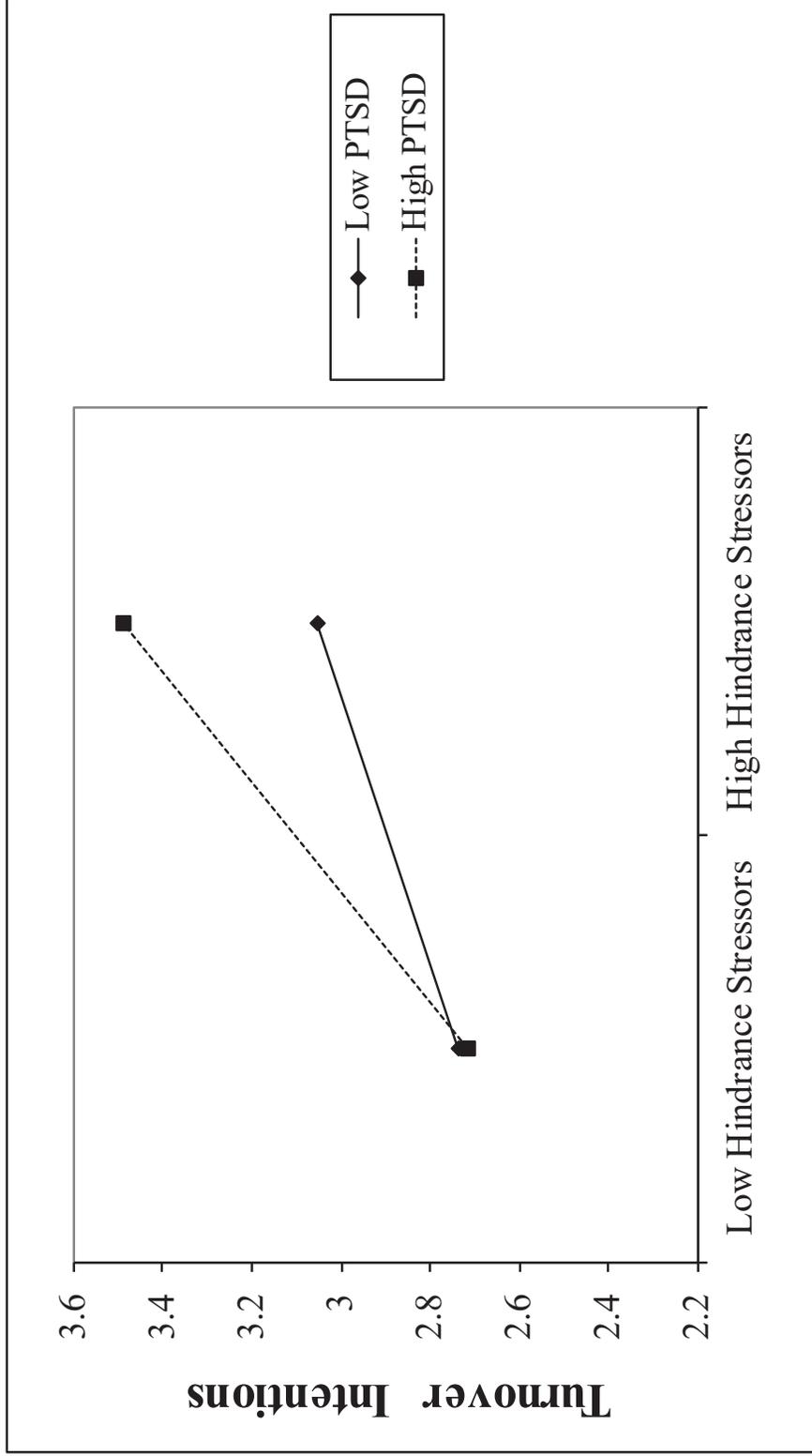
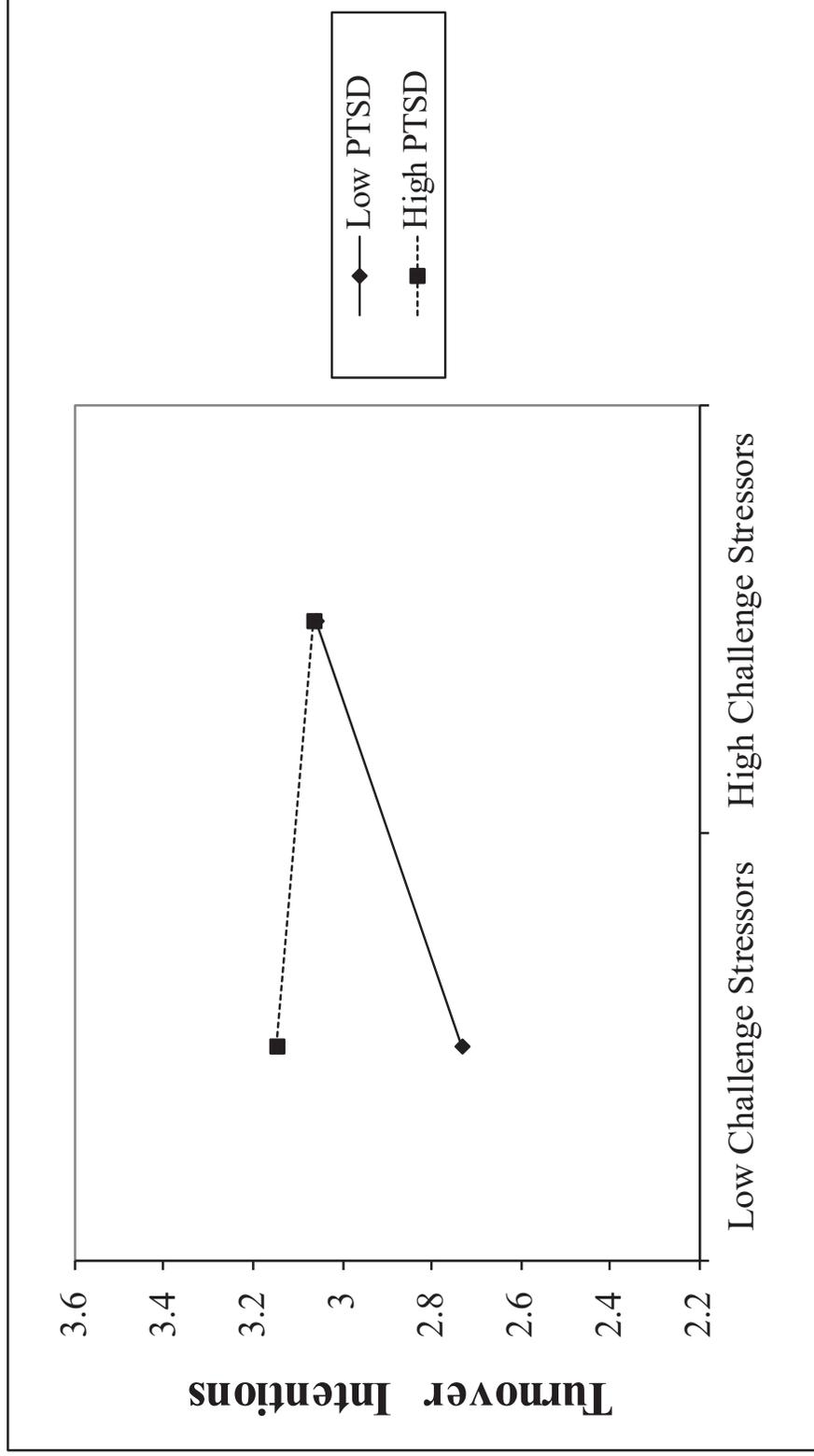


Figure 7-4 Interaction Effects of PTSD on Challenge Stressors with Turnover Intentions as the Dependent Variable.



Plotting the interaction terms for job satisfaction (Figure 7-2) illustrates those respondents with low hindrance stressors have similar levels of job satisfaction irrespective of levels of PTSD. Thus, high job satisfaction is experienced when hindrance stressors are low for respondents at all levels of PTSD. However, at high levels of hindrance stressors, all respondents report lower job satisfaction, but those with high PTSD report a steeper decrease (compared to low PTSD) and ultimately the lowest levels of job satisfaction. The effect for turnover intentions (Figure 7-3) is the same. Respondents with low hindrance stressors report the lowest turnover intentions irrespective of PTSD levels. Respondents with high hindrance stressors all report a much higher level of turnover intentions, and again, those with high PTSD report the highest. Overall, this confirms the exacerbating effect of PTSD as hypothesized, supporting Hypothesis 5.

Finally, Figure 7-4 (turnover intentions) shows significant differences at low levels of challenge stressors. Those with high PTSD report significantly higher levels of turnover intentions than respondents with low PTSD. However, at high levels of challenge stressors, this effect disappears, with respondents reporting similarly high levels of turnover intentions at all levels of PTSD when challenge stressors are high, meaning that Hypothesis 4 is not supported.

PsyCap was significantly related to job satisfaction ( $\beta=.57$ ,  $p<.001$ ) and turnover intentions ( $\beta=-.34$ ,  $p<.001$ ), adding an additional 29% variance ( $p<.001$ ) to job satisfaction and 10% ( $p<.001$ ) to turnover intentions. There is no support for Hypotheses 6a and 7a because challenge stressors are not significantly related to the job outcomes. PsyCap partially mediates the influence of hindrance stressors on both job outcomes, reducing the beta weights from  $-.29$ ,  $p<.001$  to  $-.17$ ,  $p<.001$  for job satisfaction, and  $.26$ ,  $p<.001$  to  $.19$ ,  $p<.001$  for turnover intentions. Importantly, there is strong support for Hypotheses 6c and 7c, with PsyCap fully mediating the effect of PTSD on both job satisfaction and turnover intentions. In addition, we confirmed the mediation effect of PsyCap using the Monte Carlo tests (Hayes, 2013, at 1,000 repetitions) and this was supported in both models ( $p < .05$ ).

## 7.7 Discussion

This study examined the role of job stressors on job outcomes in the under-researched locale of Pakistan and in a context of ongoing terrorism. Overall, our findings provide support for CoR theory (Hobfoll, 1989) in that individual stressors consume and diminish employees' resources, making their working lives harder, and are reflected in poorer job outcomes. However, when taken together, the consumption of resources might appear endless and unstoppable – leaving those employees with high PTSD and hindrance stressors feeling less job satisfaction and wanting to quit. While our findings for hindrance stressors equate well with meta-analytic data (e.g. Podsakoff et al., 2007), the same could not be said of the challenge stressor. The detrimental effects of hindrance stressors appear consistent across cultures while the beneficial effects of challenge stressors may not be universally beneficial. We found no evidence of challenge stressors being positively related to job satisfaction and negatively related to turnover intentions, clashing with the meta-analytic data (Podsakoff et al., 2007). We suggest this might reflect the nature of the workplace under ongoing terrorism – there is simply no 'challenge' to be had from more work projects and responsibilities – they simply become resource depleting stressors, with no apparent benefit towards satisfaction in one's job and whether to decide in a job or not.

We also explicitly tested the context of ongoing terrorism that employees face in Pakistan, as a source of extreme extra-organisational stressor via PTSD. Indeed, as expected, PTSD was detrimental to both job outcomes and aligned with our hypotheses around employees being desensitized by a prolonged period of attacks. However, its effects were modest compared to job stressors. Stressors accounted for 12% of the variance towards job satisfaction and 10% towards turnover intentions, while PTSD accounted for much more modest amounts: 2% towards job satisfaction and only 1% to turnover intentions.

In addition to the direct effects of PTSD, as a moderator, there was strong support with three significant interactions out of four. Those with high PTSD and high hindrance stressors reported the worst outcomes (lowest job satisfaction and highest turnover intentions), supporting our argument that PTSD might also exacerbate hindrance stressors. Thus, employees working in a

state of hyper-vigilance and fear due to terrorism and overwhelmed with work issues and problems, are most adversely affected.

While there was only one significant effect with challenge stressors this confirmed the complex findings from the direct effects, where challenge stressors did not reduce turnover intentions. Instead, in the interaction, respondents with low challenge stressors and low levels of PTSD reported the lowest levels of turnover intentions, while all other combinations reported significantly higher levels of turnover intentions. Given that challenge stressors did not have significant *positive* effects like meta-analyses might suggest, this might simply show that lowest turnover occurs when there are low job stressors and low extra-ordinary stressors, that is, stressors overall are low. Hence, contrary to the hypothesis and prominent literature, challenge stressors were more burdensome on the resources of employees. CoR becomes insightful here, indicating that hindrance stress in the terrorism context may take such a heavy toll on resources, that the positive (challenge) stressors don't operate in their traditional sense and instead become a burden.

However, not all of the findings were negative. We followed calls for more POB studies (Luthans et al., 2015) and tested PsyCap as a mediator of the stressor-job outcome relationships. With the job and contextual stressors, and our focus on resource depletion (CoR), PsyCap was an ideal construct to explore, because the capital for psychological strength needed to thrive in such situations. Indeed, we found PsyCap directly influencing job satisfaction and turnover. Notably, in case of PTSD, PsyCap can help regain and replenish resources to survive the psychological wearing from ongoing terrorism. Furthermore, PsyCap partially reduced the influence of hindrance stressors, supporting meta-analytic evidence of the importance of PsyCap (Avery et al., 2011). Overall, this provides evidence that PsyCap is a pivotal workplace factor for studies with contexts of extra-ordinary stressors such as ongoing terrorism.

Finally, we contextualized our sample. Those directly exposed to terrorism appeared to experience similar effects of PTSD as the wider nation. This means that the respondents from samples from the worst hit areas and those which were from less affected areas were similar in relation to outcomes. This may relate to the media showing incidences in real time (DiMaggio & Galea, 2006; Zeidner, Ben-Zur, & Reshef-Weil, 2011). This effect has been seen in prior studies

where people directly affected in Israel, and those elsewhere who were indirectly affected, still had similar levels of PTSD (Hobfoll et al., 2008).

Our mean score levels of hindrance and challenge stressors were slightly (but not excessively) higher than indicated by some studies (e.g. Cavanaugh et al., 2000; Hollebeek & Haar, 2012; Haar, 2006). However, the sample did have pronounced experiences of terrorism, with the PTSD average higher than the cut-off scores for civilians. In fact, they were in the range of PTSD scores for the military (cut-off points 45-50; National Center for PTSD, 2001). The levels of turnover intentions were at the mid-point and job satisfaction was well above the mean, while PsyCap levels were even higher. These are quite high levels, considering the context. Thus, our respondents were generally well satisfied with their jobs, but were likely to consider leaving their job. These findings show the complexity of context; despite having high hindrance stressors and PTSD, employees still have high PsyCap and are job satisfied, yet have intentions to quit. High PsyCap may reflect that they are satisfied with their jobs, but it is the stress of terrorism which pushes them to think about quitting. This warrants further exploration, and has implications for HR managers.

## **7.8 Implications and Future Research**

This study highlighted the detrimental role of hindrance stressors and PTSD on job outcomes. Organisations and managers may want to explore the role that these stressors play in their workplace. The burdens of stress and trauma of terrorism is no longer a problem affecting only terrorism-afflicted countries; the implications extend far beyond. The continuous influx of migrants and refugees brings the burden across countries and ultimately into the workforce (Gambino & Jalabi, 2014). Alternatively, organisations could explore ways to build PsyCap amongst employees (Luthans et al., 2015) for example, with in-house intervention training. This would be beneficial for both employees and the organisation.

The findings of overall small, detrimental, effects from PTSD need further exploration. Under CoR theory, different perspectives could be explored to understand the dynamics of the context. For instance, Grant and Wade-Benzoni (2009) argue that death awareness (in the case of terrorism) could be distressing but also can lead to death reflection, where one starts looking for

the meaning of life. Thus, a terrorist event may be distressing but also reflective, leading people to rethink their priorities as a result of living a more meaningful life. Shalev and Errera (2009) explained the concept of *stability within instability*, where people living under ongoing terrorism in Israel learned to work with the burdens and anxieties as they became a part of everyday life. Another plausible explanation might be that people in collectivist cultures consider social expectations and honour of their elders more important than individual happiness (Ahuvia, 2001). Thus, our sample might face societal and family expectations to keep working and be a good provider to the family, which is demanding yet fulfilling. Yet another explanation could concern the *region-beta paradox* (Bongar et al., 2007). Those under extreme stress may cope with trauma better than those who are less severely affected because intense states activate processes of psychological defence that minimize the stressor. These are mechanisms to conserve resources, which allow people to carry on with their lives. Researchers could explore these further. Finally, future research might examine other job outcomes relating to performance and well-being (e.g. job burnout).

## **7.9 Limitations**

Like many employee studies, the use of data at a single time point is not always ideal, and challenges with our sample made longitudinal design impossible. Our second limitation concerned self-reporting. Overall, the sample consists of a large number of employees, from a broad range of professions and industries, and the constructs and data analysis were robust. Podsakoff, MacKenzie, Lee and Podsakoff (2003) noted that a rudimentary check of common method variance (CMV) is Harman's One Factor Test, which we conducted. The resulting factor analysis (unrotated) yielded a number of factors, with the dominant factor accounting for less than 25% of overall variance, suggesting little evidence of CMV. Future studies could look at longitudinal design, including qualitative inquiry that deepens and widens the scope of the findings. Given the challenging nature of the context and the inherent sensitivities embedded in it, using methods such as observations or ethnographies may be challenging but useful.

## **7.10 Conclusion**

Overall, with a broad sample of employees, we found that hindrance stressors have the strongest overall effect on job outcomes, followed by PTSD, and challenge stressors having little effect. Both hindrance stressors and PTSD were detrimental individually to job outcomes, the interaction effects showed the powerful force that the context of terrorism played in depleting employees' resources. Furthermore, we found that PsyCap could offset much of the detrimental influences of stressors. Knowing that PsyCap can be enhanced through training (Luthans, Avey, & Patera, 2008), it could be used as an intervention program by the organisations. Notably our focus was Pakistan, notwithstanding this; the growth of terrorism across the globe, with the recent events in London, Paris and the ongoing terrorism in Syria, there is potential for the findings to be relevant internationally.

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## **Chapter 8**

### **Challenge-Hindrane stressors and its effect on job burn out in the employees living under on-going terrorism: the moderating role of organisational support**



**MASSEY UNIVERSITY**  
**GRADUATE RESEARCH SCHOOL**

**Statement of contribution to Doctoral Thesis containing publications**

(To appear at the end of each thesis chapter/section/appendix submitted as an article/paper or collected as an appendix at the end of the thesis)

We, the candidate and the candidate's Principal Supervisor, certify that all co-authors have consented to their work being included in the thesis and they have accepted the candidate's contribution as indicated below in the *Statement of Originality*.

**Name of Candidate: Fatima Junaid**

**Name/Title of Principal Supervisor: Professor Jane Parker**

**Name of Complete Manuscript Research Output:**

Challenge-Hindrance stressors and its effect on job burn out in the employees living under on-going terrorism: the moderating role of organisational support

**In which Chapter is the Published Work: 8**

Please indicate either:

- The percentage of the Published Work that was contributed by the candidate: and / or
- Describe the contribution that the candidate has made to the Published Work:

This paper is based on the third (quantitative) study findings. I was solely responsible for creating the survey and collection of data. My supervisor reviewed and approved the survey instruments. I analysed the data, which my supervisor then reviewed to ensure that it was correctly conducted. I drafted the paper earlier this year, and have made refinements based on

the suggestions and feedback from my supervisors.

*Fatima Junaid*

August 5<sup>th</sup> 2017

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Candidate's Signature

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Date

*Jane Parker*

August 5<sup>th</sup> 2017

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Principal Supervisor's signature

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Date

## Chapter 8

### **Challenge-Hindrane stressors and its effect on job burnout in the employees living under on-going terrorism: the moderating role of organisational support**

#### **Abstract**

With the proliferation of terrorism, the research on employees living under on-going terrorism is limited. We investigate the relationship of challenge and hindrance stressors with the stress of living under on-going terrorism; and how might it relate to job burnout. We argue that living under terrorism could cause post-traumatic stress disorder (PTSD) which could further influence job burnout. We found that all stressors detrimentally effected exhaustion and cynicism, with hindrance being the strongest followed by PTSD and then challenge stressors. Further we incorporate how organisational support can moderate the stressors-burnout relationship. Owing to the taxing context, where physical security is pivotal we add a specific construct around organisational security to our analysis as well as the established perceived organisational support construct. We found that organisational support can reduce the detrimental effect of the stressors for cynicism but not exhaustion. Future implications are discussed.

#### **8.1. Introduction**

Living under on-going terrorism is different from being exposed to one-time terrorist incident. It means that people are not only constantly exposed to terrorist attacks, suicide bombers, and deaths; but live with trauma and constant fear of threat of terrorism (Ruzek, Maguen, & Litz, 2007). We look at employees living under on-going terrorism in a non-western country: Pakistan. For the last decade, the soaring numbers of civilians killed indiscriminately, keeps Pakistan in the list of one of the five worst terrorism affected countries in the world (Institute of Econmonics and Peace, 2015). Nevertheless, employees working in organisations in Pakistan face similar work demands as in any other part of the world (Abbas & Raja, 2015). This makes Pakistan a natural setting to study the complex interaction of work and non-work stressors and its effects on employees (Junaid & Haar, 2015).

We build on Conservation of resources (CoR) theory (Hobfoll, 1989) to explain that stressors take a toll on limited psychological resources of employees working while living under ongoing

terrorism. Next we deliberate on challenge and hindrance stressors in work and non-work domains (Cavanaugh, Boswell, Roehling, & Boudreau, 2000), and categorise stress of terrorism as a non-work extreme extra organisational (Byron & Peterson, 2002). This we capture through post-traumatic stress. Furthermore, we argue that job and terrorism stressors will deplete the psychological resources of the employees in consequences lead to employee burnout. Lastly, we highlight the role of Organisational Support Theory (OST) (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Kurtessis et al., 2015) and contend that in such context organisational support can be a buffering mechanism to reduce the detrimental effects of the stressors.

The present study makes significant contributions; (1) it aims to understand how the stress of living under ongoing terrorism interacts with job stress. For this we use challenge-hindrance framework (Cavanaugh et al., 2000), and add a new non-work stress, which operates like an extreme extra-organisational hindrance stressor. We capture it using post-traumatic stress disorder (PTSD). This helps build the challenge-hindrance theory in specific and stress theory in general. (2) Combined these stressors will have detrimental effects on employees in the form of burnout. This is different from research showing that burnout and PTSD correlate/co-exist, or that burnout is an antecedent of PTSD. In those researches burnout and PTSD both are caused by the organisational factors. To our knowledge no one has addressed the gap where PTSD due to terrorism may lead to resource depletion causing job burnout. (3) We aim to extend the organisational support theory (OST). We argue that perceived organisational support (POS) could buffer the detrimental effects of stressors of job and living under on-going terrorism. We add that living under ongoing terrorism, employees will need physical security as a form of support. (4) With this we make broader theoretical contribution to CoR, by adding a different context and another type of support that organisations might offer. Providing security in the context of terrorism might conserve resources lost due to fear and anxiety, or actual physical loss to /of the employee.

## **8.2. Literature Review**

We use CoR (Hobfoll, 1989) as the base to explain our theoretical framework. CoR contends that people strive to retain, protect, and build resources and that what is threatening to

them is the potential or actual loss of these valued resources. Loss of resources causes stress; in no stress situations people try to build/conserves resources, whereas stressful situations cause resource loss.

We further build on CoR to explain the concept of resource depletion, and then incorporate the Job Demand Resources (Bakker, Demerouti, & Verbeke, 2004) model to help explain our theoretical model. According to CoR when people are in situations such as terrorism their material and immaterial resources get depleted. This depletion causes stress. Furthermore, people who live under terrorism have to still work to earn their livelihood. Therefore, at work employees face job demands which can cause stress, but they are also provided with resources which help them deal with demands. The interaction of job demands, and resources can lead to positive and negative outcomes. When employees feel that the demands exceed their resources the stress can become negative whereas if they feel adequately resourced then the stress will be positive. Thus, we argue that if employees living under ongoing terrorism are facing job stressors, they may be left with fewer resources to deal with the demands and thus feel taxed and emotionally depleted.

We further use Challenge-hindrance framework (Cavanaugh et.al., 2000) which explains that job stressors could be hindrance or challenges; it posits that if employees get challenging tasks and feel that they can attain them, then it becomes challenge stressor which have positive influence on employee outcomes. On the flip side if employees face hindrance at work and feel that those obstruct their achievement of the goals then such stressors become hindrance stressors which often lead to negative outcomes.

Using the above three theoretical grounds, we argue that when employees live under ongoing terrorism, it can deplete their psychological resources; left with fewer resources they may struggle with meeting the job demands and feel stressed. Furthermore, if employees have hindrance stressors, and feel inadequately resources to meet the demand, then it might lead to employee burnout, our arguments are aligned with the job demand-resource model (Bakker & Demerouti, (2007) which highlights that when employees face more demands than the resources they have to meet them, it can lead to employee burnout. These are further discussed below.

Next, we discuss challenge-hindrance stressors in the context of terrorism as extra organisational hindrance measured through PTSD. Using resource depletion hypothesis (Dawson, O'Brien, & Beehr, 2016) of CoR we explain how stressors may lead to burnout. Lastly, we bring Organisational support theory (OST) and use it in conjunction with CoR (Hobfoll, 1989) to explain how organisational support can act as a buffer in the context of stressors and ongoing terrorism.

### **8.3. Stressors**

Job demands that are appraised as taxing or exceeding the capacity of resources could become hindrance stressors, whereas stressors that are appraised as manageable and have a possibility of gaining benefit or resource, become challenge stressors (Cavanaugh et al., 2000; Lepine, Podsakoff, & Lepine, 2005). Work stressors can leave employees with depleting energies (Hobfoll, 1989) to deal with the non-work demands, thus work stress can spill over to non-work domains and vice versa (Haar, 2006; LePine, LePine, & Saul, 2007). While living under ongoing terrorism employees might continually feel threatened and stressed, which might spillover to work as well. Next, we discuss stress of terrorism both as hindrance and a form of extreme extra-organisational stressor.

### **8.4. Terrorism stress: Post-traumatic stress disorder (PTSD)**

Exposure to terrorist incidents can be beyond one's normal coping ability (Besser & Neria, 2009), with losses such as life of someone close, or near death experience; may cause trauma and traumatic stress PTSD (Besser & Neria, 2009; National Institute for Health and Clinical Excellence, 2005; Shalev & Freedman, 2005). Around 25–30% of people experiencing a traumatic event may go on to develop PTSD (National Institute for Health and Clinical Excellence, 2005), which can interfere with one's daily life (Cogle, Kilpatrick, & Resnick, 2012). If people are exposed to on-going terrorism they may have higher likelihood to suffer from PTSD (Williams et al., 2009).

The most characteristic symptoms of PTSD are re-experiencing, avoidance of reminders, hyperarousal and emotional numbing. These includes but are not limited to recurring flashbacks and/or nightmares; to avoid thinking or talking in detail about the event, hypervigilance for threat,

exaggerated startle responses, irritability, difficulty concentrating, lack of ability to experience feelings, feeling detached from other people, and giving up previously significant activities (National Institute for Health and Clinical Excellence, 2005).

#### **8.4.1. PTSD Terrorism and Trauma in the context of the study**

We discuss the literature of PTSD due to terrorism/trauma and highlight that it is limited in the context, thus our study is unique. Existing literature in organisational context heavily focuses on one-time exposure to terrorism incidents (MacAskill, 2014; Perlman et al., 2011; Ryan, West, & Carr, 2003; Woods, 2011) which is different from ongoing terrorism, because the threat and losses are continuous. There are three different streams of management science scholarship where living under ongoing terrorism has been studied, and we point how our context is different from all these streams. Studies on ongoing terrorism have focused on (a) military, medical or disaster service provider, (b) expatriates in terrorism endangered countries, and (c) conducted on Israeli population.

Firstly, civilians exposed to terrorism are unlike the military or medical professionals. Military or medical professionals are trained (to say the least) to cope with traumatic situations. PTSD is not “confined to the military, even if they are popularly associated with it...the media has largely ignored the psychological impact of war on civilians, even though they constitute an estimated 90% of all war casualties” (de Rond & Lok, 2016, p. 3).

Next, expatriates are different from local civilians living under terrorism, because the expatriates have several choices, like leaving their families in their home country, or sending them back to home country, or even quitting whenever it becomes overwhelming and go back to their own country (See Bader, Reade, & Froese, 2016; Bader & Berg, 2013; Bader, Berg, & Holtbrügge, 2015). Expatriates make a conscious choice of going to the host countries, against the rewards and growth they can make in their career. Also, expatriates are provided with security protocols and extra safety measures. Most of these privileges are not available to the locals.

Third, on-going terrorism in Pakistan where the civilians are killed indiscriminately, is different from terrorism-afflicted in Israel, where there is an identified opponent and a cause (Lazarus, 1985). Pakistan suffers from terrorism-afflicted by a faceless enemy. This is important

because it is the incomprehension and lack of reason which increases the horror and dislocates the values of reason and goodness in fellow human (Bongar, Brown, Beutler, Breckenridge, & Zimbardo, 2007). Thus, our research provides a different setting to understand stressors within and outside organisations.

Prior studies have used PTSD a consequence of terrorism trauma (Besser & Neria, 2009; Burke, 2012; Hall, Murray, Galea, Canetti, & Hobfoll, 2015; Hall, Saltzman, Canetti, & Hobfoll, 2015; Shalev & Freedman, 2005), few have considered exposure to terrorism an extra-organisational stressor (Byron & Peterson, 2002; Junaid & Haar, 2015). We add that it is an extreme extra organisational hindrance stressor. Based on LePine et al. (2007), non-work stressors may affect like hindrance stressors, when these become daunting and provoke emotions like anger, anxiety, and disgust. With calls for research on determining the list of non-work hindrance stressors (LePine et al., 2007); extra-organisational factors such as disaster and terrorism (James, 2011; Toker, Laurence, & Fried, 2015), and research in non-western cultures (Barkema, Chen, George, Luo, & Tsui, 2015), we suggest that terrorism evokes similar and stronger feelings (Howie, 2007); is likely to be a strong hindrance stressor. We further maintain that this is a timely and relevant inquiry. Next, we discuss how job stressors and PTSD may influence employee burnout.

### **8.5. Burnout: Emotional exhaustion and cynicism**

Burnout has two main factors: emotional exhaustion and cynicism (Bakker, Demerouti, & Verbeke, 2004; Demerouti, Bakker, Vardakou, & Kantas, 2003). Emotional exhaustion is when an employee feels emotional depletion and fatigue caused by long term stressors and excessive job demands (Maslach & Jackson, 1981). Cynicism (depersonalization) is when one tries to be indifferent or distant towards the work (Schaufeli & Greenglass, 2001), and the people on job (Maslach & Leiter, 1997).

Both challenge and hindrance stressors being demands can cause emotional exhaustion (Lepine, LePine, & Jackson, 2004). However, Yao, Jamal, & Demerouti, (2015) argue that challenge and hindrance stressors may relate differently to cynicism. Challenge stressors instill positive feeling of growth and competence, thus relate negatively with cynicism, whereas

hindrance causes feeling of anxiety, frustration, and will likely be positively related to cynicism.

Thus, we hypothesize

*Hypothesis 1: Challenge stressors will be positively related to (a) emotional exhaustion (b) and negatively to cynicism.*

*Hypothesis 2: Hindrance stressors will be positively related to (a) emotional exhaustion and (b) cynicism.*

Existing literature posits that burnout can co-occur with PTSD (Cieslak et al., 2014) in emergency and care based profession, such as nurses (Mealer, Burnham, Goode, Rothbaum, & Moss, 2009), social workers (Newell & MacNeil, 2010), firefighters (Mitani, Fujita, Nakata, & Shirakawa, 2006), and armed personal. These jobs are emotionally taxing and thus increase the likelihood of exhaustion and therefore burnout and PTSD. Most of the studies focus on emotional exhaustion as a key factor in the nature of the work, where they are consistently exposed to trauma/traumatized people as part of their work (see meta-analysis and review of literature e.g. (Cieslak et al., 2014; Newell & MacNeil, 2010 respectively). We argue that an employee living under ongoing terrorism, might suffer from PTSD; which would leave the employee emotionally taxed; with depleted resources unable to meet job demands, thus leading towards emotional exhaustion. In relation to cynicism, we argue that PTSD will be positively related. We reason that cynicism involves distancing and indifference and that in a workplace where all employees are living under terrorism, distancing might be common to avoid the reminders. This collectively might lead to cynicism.

*Hypothesis 3: PTSD will be positively related to (a) emotional exhaustion and (b) cynicism.*

## **8.6. POS**

POS is the degree to which employees believe that their organisation values their contributions and cares about their well-being and fulfils socio-emotional needs (Eisenberger, Huntington, Hutchison, & Sowa, 1986). Supportive organisations are likely to minimise the pressures (Rhoades & Eisenberger, 2002) and stressors, whereas unsupportive organisations are likely to do the opposite. Recent meta-analysis shows that POS reduces stress (Kurtessis et al., 2015), and specifically been found to reduce job burnout (Maslach & Leiter, 1997).

*Hypothesis 4: POS will be negatively related to (a) emotional exhaustion and (b) cynicism.*

Since in the case of terrorism and trauma victims feel a loss of resources; objectively, in the form of loss of infrastructure and life, and subjectively in terms of loss of friends and co-workers. Especially in case of on-going terrorism, social support helps reduce stress by being able to share and relate with one other (Hobfoll, Tracy, & Galea, 2006; Kaniasty & Norris, 2004). Similarly, in threatening situations, social support reduces fear and anxiety (Dawson et al., 2016). Like social support, management could devise ways to provide support to those who suffer direct or indirect losses, in areas where interventions do not often reach. POS played the role of a buffer in case of stress experienced by expatriates working in terrorism-afflicted countries (Bader, Berg, et al., 2015; Bader, Schuster, & Dickmann, 2015). de Rond and Lok (2016) found that military medical teams in Iraq and Afghanistan exposed to war felt that organisations in such cases could provide a place of familiarity; where people try to find meaning in their work, and aim to serve some purpose. Maslach and Leiter (1997) advocate that “[b]urnout is not a problem of the people themselves, but of the social environment in which they work” (p. 18). Therefore, organisations may play a helpful role here. All these point that POS can benefit when people are living under terrorism.

*Hypothesis 5: POS will moderate the relationships between stressors and (a) emotional exhaustion and (b) cynicism, reducing the detrimental effects of stressors and PTSD and enhancing the beneficial effects of challenge stressors.*

We argue that feeling physically safe while living under terrorism should conserve resource under CoR theory, and organisations could help create that sense of security for their employees. It is plausible that providing employees’ security, in form of armed guards, and surveillance system should be added to POS. We developed a four items measure (see annex a) and called it security POS. Security POS could help employees feel less stressed and better equipped to deal with terrorism. Further, employees might benefit from Security POS, by feeling less exhausted. Being cared for beyond the organisation; would create a sense of reciprocity which could reduce depersonalization and cynicism. This would help strengthen their well-being by reducing burnout. There is limited literature in terms of the role of organisational support in the

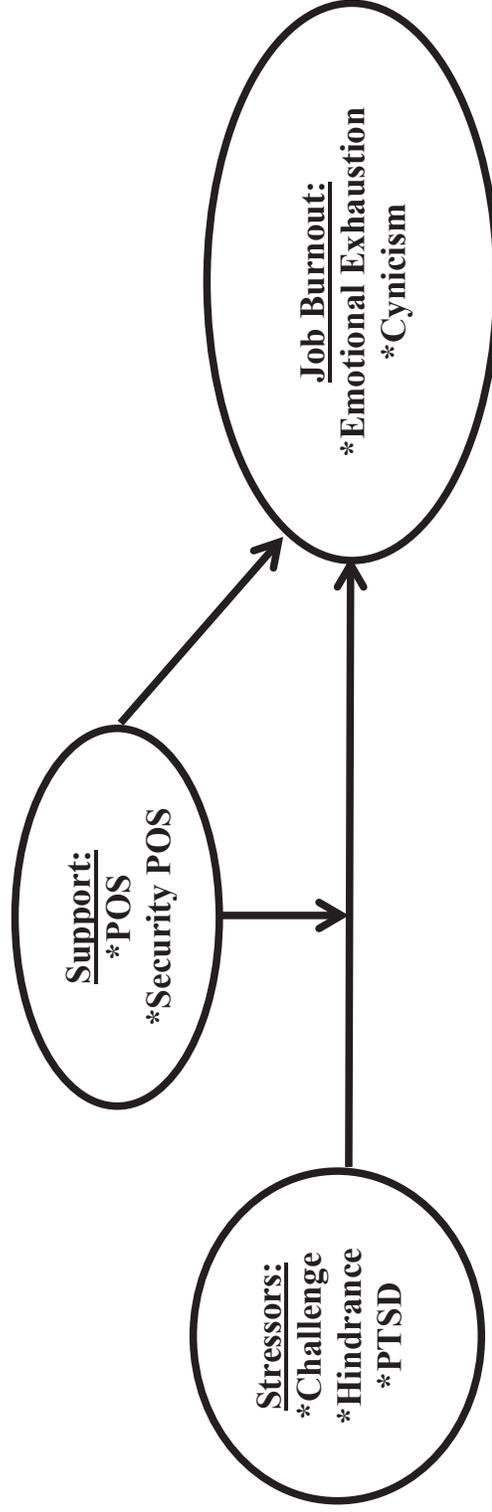
context of challenge-hindrance and terrorism, thus we hypothesize the relationships based on the above arguments.

*Hypothesis 6: Security POS will be negatively related to (a) emotional exhaustion and (b) cynicism.*

*Hypothesis 7: Security POS will moderate the relationships between stressors and (a) emotional exhaustion and (b) cynicism, reducing the detrimental effects of stressors and PTSD and enhancing the beneficial effects of challenge stressors.*

Our study model is shown in Figure 8-1.

Figure 8-1 Study Model for Challenge Hindrance stressors and PTSD, POS and Security-POS and employee outcomes



## **8.7. Methods**

### **8.7.1. Sample and Procedures**

Data were collected in Pakistan, (all major cities, especially Khyber PakhtunKhawa, and Federally administered Tribal areas) during June-August 2016. Purposeful sampling was undertaken to attract respondents (Coyne, 1997) for two key reasons. Firstly, the ethics committee had highlighted that only those people without an immediate loss in the last month (preferably two months) should be contacted. Secondly, as per the NATO guidelines, due to the sensitive nature of the region, caution and diligence was required. The first author used her networks from academia to contact the first 300 respondents, and then used snowball sampling. It is estimated some 800 employees were contacted in total, with 547 people visiting the online survey but only 416 respondents completed the survey.

On average, the participants were 32 years (SD=7.4 years), married (51%), male (66%), and non-parents (65%). Respondents were highly educated with 56% having a master's degree, 27% having an above master's degree qualification, and 13% have a university degree. The remainder had high school qualification equivalent (4%). By sector, just over half were in the private sector (52%), followed by the public sector (36%) and not-for-profit (12%).

### **8.7.2. Measures**

*Challenge Stressors* and *Hindrance Stressors* were measured using the 11-item scale developed by (Cavanaugh et al., 2000) and were coded 1=no stress, 5=great deal of stress. While previous studies have found support for these two dimensions including outside the US (Haar, 2006; Hollebeek & Haar, 2012). We conducted an exploratory factor analysis (principal components, varimax rotation) and we find support for the two-factor measure of challenge and hindrance stressors: eigenvalues 4.089 and 1.936, accounting for 37.2% and 22.3% of the variance explained, respectively). The measures reliability was challenge stressors ( $\alpha = .86$ ) and hindrance stressors ( $\alpha = .73$ ).

*Post-Traumatic Stress Disorder* was measured using the established 17-item scale by (NICE, 2005) coded 1=not at all, 5=extremely. A sample item being “Repeated, disturbing memories, thoughts, or images of a stressful experience from the past?” This scale had excellent reliability ( $\alpha=.95$ ).

*Job burnout* was measured using 10 items from the Maslach and Jackson (1981) scale, coded 1=never to 5=always. The *Emotional Exhaustion*, and *Cynicism* dimension were measured with 5 items each, with ( $\alpha =.89$ ) and ( $\alpha =.85$ ) respectively.

*POS* measured with 8-items from (Eisenberger et al., 1986) and *Security POS* was measured with 4-items, both coded 1=strongly disagree through 5=strongly agree. We confirmed the distinct nature of Security POS and POS by using exploratory factor analysis (EFA), with the data splitting into two distinct factors as expected. Table 8-1 shows all items, factor loadings and reliabilities, and provides evidence of construct validity for our Safety POS measure as distinctive from POS.

**Table 8-1. Results of Exploratory Factor Analysis for POS & Security POS**

	Factor Loadings	
	POS	Security POS
Questions followed the stem "My Organisation..." and were coded 1=strongly disagree, 5=strongly agree		
1 I feel safe at my workplace	.098	<u>.905</u>
2 I feel safe in my workplace from the threat of terrorism	.095	<u>.895</u>
3 My organization values workplace security	.326	<u>.520</u>
4 My organization provides armed security at my workplace	-.024	<u>.497</u>
5 Even if I did the best job possible, the organization would fail to notice [Rev]	<u>.785</u>	.161
6 My organization shows very little concern for me [Rev]	<u>.768</u>	.038
7 My organization cares about my general satisfaction at work	<u>.715</u>	.002
8 My organization values my contribution to its well-being	<u>.713</u>	.068
9 My organization really cares about my well-being	<u>.696</u>	.060
10 My organization takes pride in my accomplishments at work	<u>.687</u>	.049
11 My organization would ignore any complaint from me [Rev]	<u>.631</u>	.213
12 My organization fails to appreciate any extra effort from me [Rev]	<u>.601</u>	.152
Eigenvalues	4.068	2.244
Percentage variance	33.9%	18.7%
Number of items in measures	8-items	4-items
Cronbach's Alpha	.86	.71

[Rev] = Reverse coded. POS = Perceived Organizational Support

Overall, the EFA confirms that the four items for Security POS load upon their own factor, as distinct from the eight items for POS. Furthermore, the Security POS and POS have strong reliabilities and represent diverse constructs. We further tested the differences between the two support constructs using CFA in AMOS v 22. Here, we test the two-factor model (determined above) with a comparison one-factor model where all items are combined on a single construct. We followed suggestions by (Hair, Black, Babin, & Anderson, 2014) and find that the two-factor model is superior (at  $p < .001$ ) to the single-factor model: change  $\chi^2(3)=536.0$  ( $p=.000$ ). Three control variables were used: Age (years), marital status (1=married/de facto, 0=single), and parental status (1=parent, 0=non-parent).

### **8.8. Analysis**

To examine the direct effects of challenge and hindrance stressors and PTSD on job burnout (Hypotheses 1-3), the direct effects of POS and Security POS (Hypotheses 4-5), and the potential moderating effects of POS and Security POS (Hypotheses 6 and 7), two hierarchical regression analysis were conducted in SPSS for (1) emotional exhaustion and (2) cynicism. Control variables (age, marital status, family size) were entered in Step 1. The stressors (challenge and hindrance) and PTSD were entered in Step 2. The potential moderators (POS and Security POS) were entered in Step 3, and the interaction effects (stressors and PTSD multiplied by POS and then again multiplied by Security POS) were entered in Step 4. We followed the recommendations of Aiken and West (1991) regarding the centering procedure, and thus all interaction variables were z-scored. Consistent with Cohen and Cohen (1983) recommendations, regression coefficients for the control effects were obtained from Step 1 in each analysis, predictor effects were obtained from Step 2, and moderator effects from Step 3, interaction effects from Step 4.

### **8.9. Result**

Descriptive statistics for all variables are shown in Table 8-2.

**Table 8-2. Correlations and Descriptive Statistics of the Study Variables**

	Mean	SD	1	2	3	4	5	6	7	8
1. Age	32.0	7.4	--							
2. Hindrance Stressors	3.0	.92	-.19**	--						
3. Challenge Stressors	2.9	.83	-.02	.31**	--					
4. PTSD	2.2	.93	-.25**	.29**	.16**	--				
5. POS	3.0	.73	.03	-.42**	-.19**	-.12*	--			
6. Security POS	3.4	.99	.07	-.26**	.01	-.20**	.28**	--		
7. Emotional Exhaustion	2.6	.98	-.18**	.33**	.35**	.33**	-.31**	-.14**	--	
8. Cynicism	2.3	1.0	-.17**	.32**	.18**	.27**	-.40**	-.23**	.70**	--

N=416, \*p< .05, \*\*p< .01

Explaining Table 8-2, hindrance stressors was significantly correlated to challenge stressors ( $r=.31, p<.01$ ), PTSD ( $r=.29, p<.01$ ), POS ( $r=-.42, p<.01$ ), Security POS ( $r=-.26, p<.01$ ), emotional exhaustion ( $r=.33, p<.01$ ) and cynicism ( $r=.32, p<.01$ ). Challenge stressors was significantly correlated to PTSD ( $r=.16, p<.01$ ), POS ( $r=-.19, p<.01$ ), emotional exhaustion ( $r=.35, p<.01$ ) and cynicism ( $r=.18, p<.01$ ). PTSD was significantly correlated to POS ( $r=-.12, p<.05$ ), Security POS ( $r=-.20, p<.01$ ), emotional exhaustion ( $r=.33, p<.01$ ) and cynicism ( $r=.27, p<.01$ ). POS was significantly correlated to Security POS ( $r=.28, p<.01$ ), emotional exhaustion ( $r=-.31, p<.01$ ) and cynicism ( $r=-.40, p<.01$ ), while Security POS was significantly correlated to emotional exhaustion ( $r=-.14, p<.01$ ) and cynicism ( $r=-.23, p<.01$ ). Finally, the job burnout dimensions were significantly correlated with each other ( $r=.70, p<.01$ ). Results of the regressions for Hypotheses 1-7 are shown in Table 8-3.

Hindrances stressors is significantly related to emotional exhaustion ( $\beta=.19, p<.01$ ), as is challenge stressors ( $\beta=.26, p<.001$ ) and PTSD ( $\beta=.21, p<.001$ ), which supports Hypotheses 1a, 2a and 3a, related. Hindrances stressors is also significantly related to cynicism ( $\beta=.24, p<.001$ ), as is challenge stressors ( $\beta=.12, p<.05$ ) and PTSD ( $\beta=.17, p<.01$ ), which supports Hypotheses 2b and 3b, but not 1b, because challenge stressors was positively related and not negatively related to cynicism. Overall, stressors and PTSD accounts for large amounts of variance towards emotional exhaustion (22%,  $p<.001$ ) and more modest amounts towards cynicism (14%,  $p<.001$ ).

**Table 8-3. Hierarchical Moderated Regression Analysis for Job Burnout**

Variables	Emotional Exhaustion				Cynicism			
	Step 1	Step 2	Step 3	Step 4	Step 1	Step 2	Step 3	Step 4
<i>Controls</i>								
Age	-.06	-.02	.01	-.01	-.07	-.04	-.01	-.01
Marital Status	-.04	-.07	-.11	-.11	-.08	-.11	-.18*	-.20**
Parental Status	.05	.12	.11	.11	.07	.12	.13*	.12*
<i>Predictors:</i>								
Hindrance Stressors		.19**	.08	.10		.24‡	.08	.04
Challenge Stressors		.26‡	.25‡	.27‡		.12*	.11*	.13*
PTSD		.21‡	.20‡	.20**		.17**	.15**	.13*
<i>Moderators:</i>								
POS			-.22‡	-.20**			-.33‡	-.36‡
Security POS			-.03	-.01			-.11*	-.04
<i>Interaction Effect</i>								
Hindrance Stressors x POS				-.02				.12*
Challenge Stressors x POS				.09				-.05
PTSD x POS				.01				-.03
Hindrance Stressors x Security POS				-.03				-.17*
Challenge Stressors x Security POS				-.07				.07
PTSD x Security POS				.00				-.09
R <sup>2</sup> change	.01	.22‡	.04**	.01	.01	.14‡	.11‡	.03*
Total R <sup>2</sup>	.01	.23	.27	.28	.01	.16	.27	.30
Adjusted R <sup>2</sup>	.00	.21	.24	.23	.00	.14	.24	.26
F Statistic	0.493	11.481‡	10.680‡	6.237***	1.111	7.178‡	10.585‡	6.947‡

\*p<.05, \*\*p<.01, ‡p<.001 Standardized regression coefficients.

POS is significantly and negatively related to emotional exhaustion ( $\beta = -.22, p < .001$ ) but Security POS is not ( $\beta = -.03$ , non-significant), supporting Hypothesis 4a but not 6a. Towards cynicism, both POS ( $\beta = -.33, p < .001$ ) and Security POS ( $\beta = -.11, p < .05$ ) are significantly related, supporting Hypotheses 4b and 6b. The two support constructs account for 4% of the variance to emotional exhaustion ( $p < .01$ ) and 11% to cynicism ( $p < .05$ ). While there were no significant interactions towards emotional exhaustion (failing to support Hypotheses 5a and 7a), there was support towards cynicism. POS had a significant interaction effect with hindrance stressors towards cynicism ( $\beta = .12, p < .05$ ), while Security POS also had a significant interaction effect with hindrance stressors ( $\beta = -.17, p < .05$ ), accounting for an additional 3% ( $p < .05$ ) variance towards cynicism. To facilitate interpretation of the interaction effects for cynicism, plots of the interactions are presented below in figure 8-2 and 8-3.

Plotting the interaction terms (Figure 8-2) illustrates those respondents with low hindrance stressors have huge differences in cynicism, with respondents with high POS reporting levels of cynicism a full point lower than respondents with low POS. At high levels of hindrance stressors, respondents with high POS report a slight increase in cynicism while those with low POS report a slight decrease, however the effects are still pronounced and show large differences, with respondents with low POS reporting much higher cynicism. This supports Hypothesis 6b.

Plotting the interaction terms (Figure 8-3) illustrates those respondents with low hindrance stressors have similar levels of cynicism across respondents with low or high Security POS. However, at high levels of hindrance stressors, respondents with high Security POS report a decrease in cynicism while those with low Security POS report an increase in cynicism, supporting the buffering Hypothesis. This supports Hypothesis 7b.

Figure 8-2 Interaction Effects of POS on Hindrance Stressors with Cynicism as the Dependent Variable.

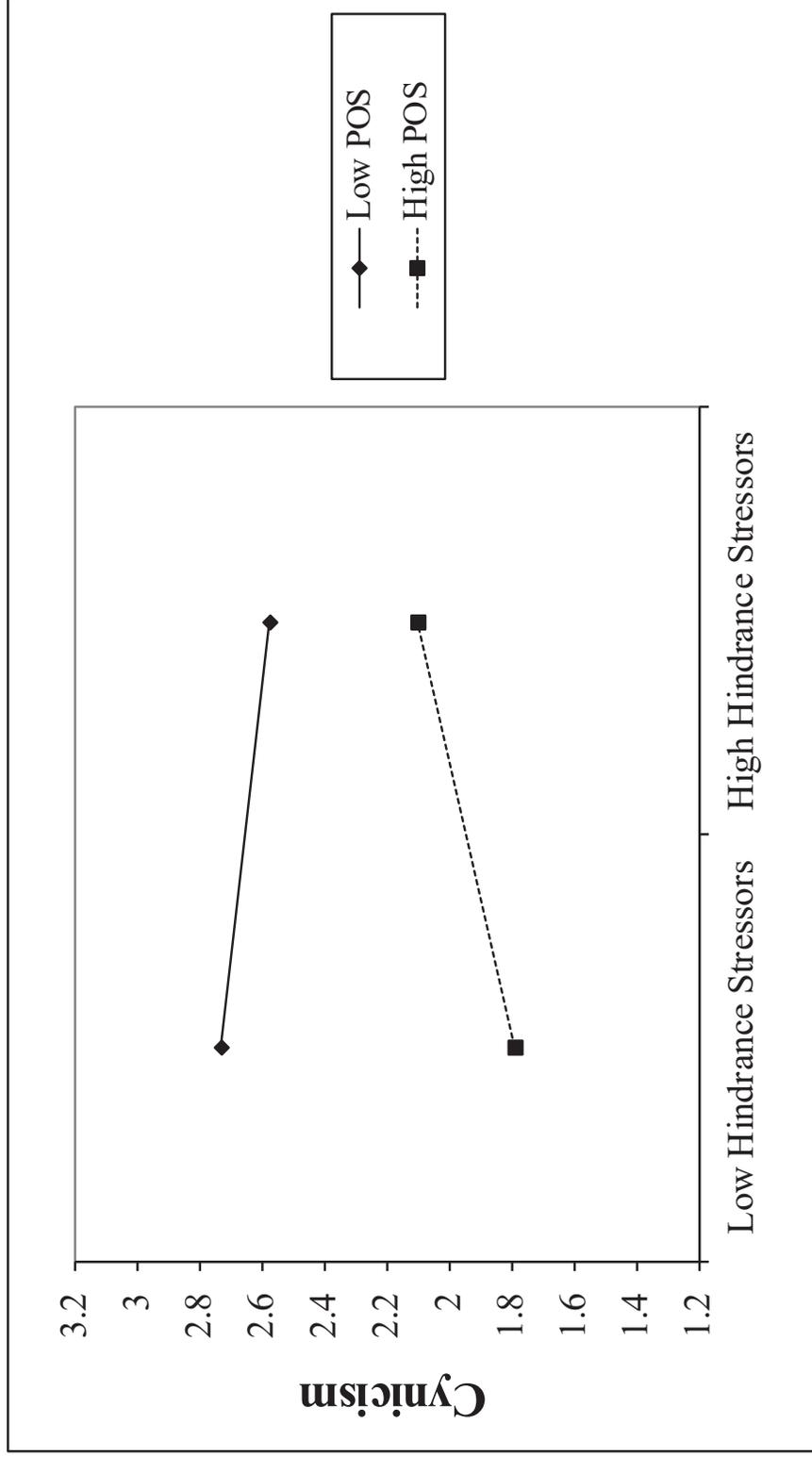
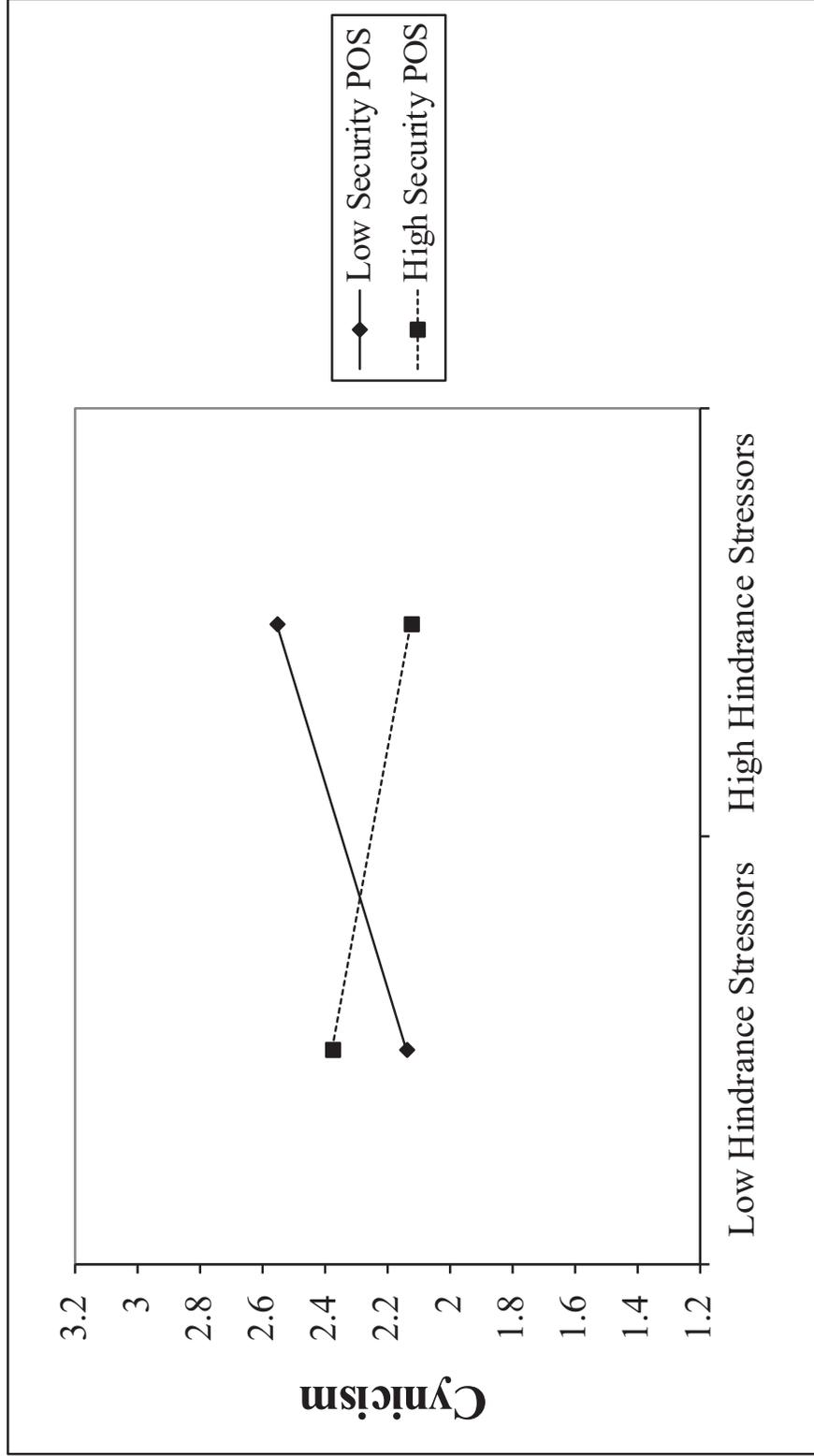


Figure 8-3 Interaction Effects of Security POS on Hindrance Stressors with Cynicism as the Dependent Variable.



## **8.10. Discussion**

The present study has made some interesting contributions about the effects of terrorism. The authors would like to highlight that despite the extreme context, challenge and hindrance stressors weren't detrimentally high, with mean scores that are similar to studies done in other parts of world (the average was 2.87, 2.98 respectively). However, PTSD rates were not similar to usually reported global scores. In general population, prevalence of PTSD is 15% (NICE, 2005). For the general population the cut-off point is scores above 35. In our case 48% of the people have higher than 35 scores. 32.9% of the population was above the cut off used to diagnose PTSD in war veterans (cut-off points for war veterans are 45-50 see the National Center for PTSD, (2001) for details), which reflects the extremity of the situation. Despite the high PTSD scores, emotional exhaustion and cynicism were not very high, being 2.58 and 2.30 respectively. For comparison, a study of New Zealand managers found similar levels of 2.6 for emotional exhaustion and 2.2 for cynicism (Roche & Haar, 2013).

We use CoR theory (Hobfoll, 1989) and the depletion hypothesis (Dawson et al., 2016), that suggests the depletion of resources in one domain such as work, will lead to the unavailability of resources in the other domain i.e. non-work. This might explain that in case of terrorism employees possibly tried to appraise the situation as beyond one person's control, thus focused on the job more, which is reflected in job stressors being stronger predictor than PTSD.

We also found that challenge stressors were not taken as positive, which does align with the meta-analysis (Podsakoff et al., 2007). Thus, similar to western economies, employees in Pakistan feel so under resourced due to depletion from hindrance and PTSD stressors, that challenge stressors becomes yet another burden, stripping it of any potential positive influence on well-being outcomes. Our study showed that despite the high PTSD, emotional exhaustion and cynicism were not high within the sample. It is possible that people may be cynical outside the workplace, but it was not seen in relation to work. For example, perhaps towards terrorists, military action, or Government handling of the ongoing crisis. This may be because in all the chaos, misery and instability in the environment; the workplace may serve as a constant source

of normalcy - which in turn, protects them from being burnt out. Another reason for not having high job burnout may be emotional distancing from the painful experience. Instead of being cynical towards work one is likely to distance from terrorism and attach with the organisation.

It is also worth noting that interacting with customers or making sales calls where the threat of terrorism is imminent, makes the stress of job and terrorism overlap. Mitani et al. (2006) found that in the firefighter profession, job stressors related more strongly to burnout as compared to PTSD. Although firefighting is by no means comparable to the job stress of the sample studied in this research, the fact that the employees at work are continually exposed to trauma and threat to life, may be a similarity worth exploring in the future.

We found that those with low POS were more cynical as compared to those who had high POS. this resonates with existing research. In case of Security POS we found that those reporting low hindrance stressors had similar levels of cynicism irrespective of Security POS, however when Security POS was high it showed a pronounced difference in those reporting high hindrance stressors. This relates with research of social support which argue that social support (Hobfoll, Tracy &Galea, 2006) can reduce the detrimental consequences of stressors, and broadly with the POS studies where POS buffered the effects of stressors for those expatriates who were working in terrorism inflicted countries (Bader and colleagues, 2015).

We also found that POS and Security-POS can play important roles in relation to PTSD, exhaustion and cynicism. In situations where there is long standing terrorism and trauma, having a supportive organisation, helped reduce the detrimental consequences of the stressors. Secondly, Security-POS being based on physical security provided by the organisation, shows that the feeling of safety helps employees feel less stressed. This is amongst the first studies to explore POS in such an extension, and the findings do lead us to encourage researchers to further explore this in the context of ongoing terrorism.

#### **8.11. Limitations and future directions**

Like other research our research faces several limitations. We acknowledge that due to the nature of the study we used purposive and snowball sampling. Our study was quantitative in nature which also has its own limitations, such as common method bias, and social desirability in

response to questions. Similarly, our sample size did not include the lower socioeconomic groups which might be even more affected, as the studies of terrorism show that the likelihood of PTSD is higher in disadvantaged population groups. Mixed methods or longitudinal studies in such cases can lead to better validity and generalizability.

We contribute to theory and practice. First, to the best of our knowledge no one, has used the challenge-hindrance model, to incorporate the non-work factor of living under on-going terrorism to see the interactive or collective effect? We build on CoR by providing insight from a unique context where we use the theory as a lens to better understand the conservation of resources. We also add to OST by adding a potential means of support, thus extending the theory. With the continuous toll on psychological resources of employees the role of psychological capital in such situations is another area which can give fruitful results.

Our study contributes to practice, as it builds the understanding that organisations can help their employees by providing the kind of support they need in their contexts. With the prevalence of terrorism, organisations might be the only source for employees working in those dire circumstances. Future research could look into ways where organisations can help employees feel safe, by providing the necessary security. Research can also compare between employees who are on desk jobs versus those who go out for sales, there may be different security protocols and implications for the respective places. Those inside the organisation might not be aware if the whole building is hit. Such organisations which have been blasted once and then rebuilt can provide useful ground to study employee stress in such circumstances.

## **8.12. Conclusion**

The prevalence and growth of terrorism has made it an important area to research for management sciences where factors outside the organisation may often be overlooked (Byron & Peterson, 2002; Johns, 2006; Toker et al., 2015). Our aim was to provide insights into a different context and we hope that it will trigger interest amongst researchers to study such contexts which are disadvantaged, and difficult to target.

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## Chapter 9

### Discussion, Future Research, Limitations and Conclusion

#### 9.1. Overview

The chapter opens with brief overview of the findings. These are followed by a discussion of the overall study provided in section 9.2. Further, section 9.3 addresses the limitations of the research. Next, the contributions of the study to theory and practice are presented in sections 9.4 and 9.5, which is followed by sections 9.6 and 9.7 which discuss the implications for theory and practice. Lastly, section 9.8 presents the conclusion of the study.

##### *9.1.1. Brief research findings*

***RQ1: What influence does the terrorism context (around PTSD) have on Pakistani workplaces and their employees?***

***RQ2: What influence do stressors (job stressors and PTSD) have on Pakistani employee outcomes? Is one stressor more dominant? Do job stressors and terrorism stressors (PTSD) interact and have a more detrimental influence on outcomes?***

The first two research questions were aimed at understanding stress experienced by employees living in the context of terrorism, which included job stressors (hindrance and challenge stressors), and terrorism-related stress (PTSD). The first study affirmed the assumption that people in such a context live under constant fear of loss and stress of terrorism, which often leaves them traumatized. The qualitative study strongly pointed to the possibility of PTSD amongst the workforce. This provided further confidence to use PTSD as a lens to understand the stress of living under on-going terrorism. The quantitative study results acknowledged that people were indeed suffering from PTSD and as noted in paper #5 (Chapter 8), the levels were very high – similar to findings from combat soldiers (National Center for PTSD, 2001). In relation to the interplay of job stressors and terrorism stress, the qualitative study highlighted that along with the trauma of terrorism people had significant amount of job stress. The quantitative study used the above findings and found that job (hindrance) stressors to be a stronger determinant of employee outcomes than PTSD.

These research questions provided interesting points of enquiry to determine how the interactions of the stressors might influence employee outcomes. They focused on the most important outcomes in the context of living under on-going terrorism. Some outcomes were discussed qualitatively; others were tested quantitatively, yielding an interesting mix of publication articles. Key outcomes that were affected by stressors were performance, intention to leave, turnover, absence, job satisfaction, burnout and voluntary behaviour of helping colleagues. PTSD strongly affected performance, turnover, absence and voluntary behaviours. Job (hindrance) stressor was a stronger predictor of job satisfaction, turnover intentions and burnout. The stressors positively related to the negative; and negatively related to the positive employee outcomes.

***RQ3: What is the nature and role of support for employees working while living under terrorism? Are perceptions of support beneficial? Are there any specific nuances? Does support buffer the influence of stressors on outcomes?***

***RQ4. What role do individual psychological resources play? Are they helpful in dealing with job stressors and PTSD? What is the role of POS in job stress, PTSD-outcomes relationships.***

The above research questions addressed the nature and role of organisational support in the context of PTSD and job stress. It was found in study 1 that employees wanted organisational support, but they also expected organisation to provide them physical security on the premises of the organisation. They considered this as a form of support provided by the organisation, reflecting the organisation being caring towards the employees. There was no existing measure for such a concept. Therefore, the I developed a contextual organisation support tool (security-POS in study 2). The results of studies 1 and 2 showed that the employees benefited from organisation support and the security-POS, which in turn reduced the detrimental effects on employee outcomes. The last research question focused on the role of PsyCap in the relationship of job stress, PTSD and outcomes. Results showed that PsyCap was able to reduce the detrimental consequences of the stressors on employee outcomes.

With this brief overview of the research findings; the next section presents overall discussion for the three studies.

## **9.2. Discussion based on the Qualitative and Quantitative studies**

The benefit of the combining qualitative and quantitative studies is that it gives confidence in the overall research findings by confirming and providing explanations for the results. This aligns with the benefits of conducting mixed methods research (Giddings & Grant, 2006). Below, the insights are discussed, laying the foundation for the study contributions and implications, which are discussed in later sections (9.4 - 9.7).

### **9.2.1. Research context**

The samples of this study differed from previous studies done in the context of terrorism such as population is living under on-going terrorism in Israel, where their enemy is known. Similarly, other terrorism research has been conducted on war veterans or serving soldiers and those exposed to single terrorism incidents. Literature in the context of this study is limited; therefore, the findings are discussed in relation to the closest existing research.

Most of the research in the context of on-going terrorism is done on the Israeli population, which finds that PTSD is not highly prevalent in that population. However, in my research it was found that the rate of PTSD (overall 50% of the sample had scores above mean scores above 2<sup>1</sup>) was higher than that of the civilians in Israel, the higher scoring Israeli samples had 27% of the sample above mean scores 2 (Besser & Neria, 2009) (Hobfoll et al., 2008; Romanov, Zussman, & Zussman, 2012; Waxman, 2011). The PTSD levels appeared closer to those amongst the war veterans of the United States (National Center for PTSD, 2001).

PTSD could be high because of a number of reasons beyond terrorism, for example, child abuse, traumatic accident, bullying at work (Brewin et al., 2000). Thus, the respondents in my study were categorically asked (both in the interview and the questionnaire) to respond to PTSD questions with regards to terrorism, and not any other life traumas. This highlighted that the rates of PTSD reflected stress of terrorism.

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<sup>1</sup> In my study Means scores for the three factors of PTSD were all above 2. Intrusion = 2.3, Avoidance= 2.2, Hyperarousal= 2.1

### *9.2.2. Job and terrorism stress interplay*

The purpose of this research was to investigate the interplay between PTSD and job stressors. This was done to achieve a clearer understanding of how and why they impacted employees the way they did. The qualitative and quantitative studies collectively provided the answers - elucidating the interplay of stressors and their effects on the outcomes. This further supports the choice of method used, because, with one type of research we would not have learnt what we know now. This is discussed next.

The qualitative study highlights the job stresses were strong, but the stress of terrorism took centre stage once the interviews continued. According to HR Managers, their employees' experience and live with the fear, trauma and loss of loved ones, and deal with issues of physical security and damages to organisational and other property. Despite that, the quantitative study showed that while PTSD was high and job stressors were modest, the influence amongst the various stressors (hindrance, challenge and PTSD) showed that the influence of job stressors was clearly stronger than that of PTSD. In this regard, the qualitative study assists in informing why the effects of PTSD were less pronounced than that of (hindrance) stressors in terms of impact. The respondents in study 1 spoke about "habituation towards", "getting used to", and "having to live with" terrorism. The HR Manager/respondents stated that for their employees, stress relating to terrorism was out of their control whereas job stressors were factors that employees could do something about. The informants gave examples such as employees could address job stress by working for fewer hours, or completing tasks by working longer hours, whereas terrorism was entirely beyond their control. This made job stressors important, because we learn from CoR (Hobfoll, 1989) that people invest their energies in domains where they feel the possibility of some achievement. On-going terrorism might be something that evidently is beyond control thus they might try to avoid reflecting on and investing energies in it. It is completely opposite to the "stress-balance hypothesis" provided by Reichel and Neumann (1993) for Israeli population, where they found that job stress was not a strong predictor of outcomes because, the stress of the outside environment was possibly overriding the stress within the organisation.

Collectively, the studies crystallize the findings that terrorism being an extra-organisational stressors is something beyond the control of employees and that it leads people to conserve their resources by focusing on their job rather than terrorism because people invest resources where they see that the investment can yield results rather than where it will not (Dawson, O'Brien, & Beehr, 2016). In this regard, employees cannot change or modify the terrorists' activities, but they can at least try to perceive their work and its issues/factors differently.

*a. Challenge and hindrance stressors*

Hindrance stressors are often associated with negative outcomes, whereas challenge stressors may lead to beneficial outcomes (Prem, Ohly, Kubicek, & Korunka, 2017). In my studies, hindrance and challenge stressors both behaved as burdens. This is explainable if we see that both stressors deplete resources (Podsakoff et al., 2007). The context of constant terrorism may be so resource depleting that the employees might find challenges as burdensome as well. Revisiting the qualitative study findings helped explain that since the employees were continually stressed, therefore having challenging targets was often seen as an added burden. Thus, the benefits of the challenge stressors are lost. This could not have been realised without having both sources of data. Importantly, my empirical findings reflect the meta-analysis of Podsakoff et al. (2007) whereby hindrance stressors are detrimental to job and well-being outcomes. While the findings from my Pakistan employee sample mirror the detrimental influence of challenge stressors on well-being outcomes (significant and positive correlations with both job burnout dimensions), the lack of a significant beneficial influence on job outcomes runs counter to the meta-analysis, and provides some stark warnings about the universal nature of challenge stressors. Clearly, more research in extreme settings is required to confirm these effects; this is discussed in section 9.6.1 in implications for theory.

**9.2.3. Job satisfaction and turnover intentions**

The most pertinent findings regarding job satisfaction and turnover intentions come by combining the studies' results. The studies showed that the employees were not highly dissatisfied with their jobs, the mean score was 3.5. On the other hand, turnover intentions were not very low

with a mean score of 3.0, moderate mean scores found in other studies are around 2.5, for instance (Haar, Roche, and Taylor (2012). I discuss job satisfaction and turnover intentions using the findings of both the study 1 and 3.

Those who were stressed because of their jobs and terrorism, were thinking of quitting or had quit, this reflects the turnover intentions being above moderate. However, there were two reasons due to which employees stayed, which provides us insights for the findings around job satisfaction. The informants in study 1 explained that those who could have left had done so. Those remaining behind were either those staying by choice, or those who do not have a choice to leave the country. This highlights that those staying by choice are likely to be resourceful, because, despite having resources to leave the country, they chose to stay because of their families or personal reasons. This freedom to choose often itself is satisfying and motivating (Deci & Ryan, 1985) and may improve job satisfaction. This might be the plausible explanation for the moderate levels of job satisfaction.

On the other hand, those forced to stay may be the less resourceful. Nandi et al. (2004) argued that, post 9/11, due to financial crisis; there was rampant job loss and high job insecurity; perhaps people were happy to have jobs. Therefore, job satisfaction was not entirely adversely affected. They further reasoned that job satisfaction was no better or worse off because of PTSD in the post 9/11 times. Like the post 9/11 times, in my study, some informants explained that organisations were shrinking their foot print due to terrorism, which points to possible job loss. Therefore, for the less resourceful employees, having a job might itself be a source of satisfaction.

Keeping the context under consideration, de Rond and Lok (2016) suggest that people working in war zones want to find familiarity, purpose and a sense of control; this could possibly give them feeling of normalcy in the otherwise chaotic and surreal environment. Applying this explanation, it is possible that the employees in my study immerse themselves into the job as a way of distracting themselves from uncontrollable terrorism. The workplace might provide familiarity, purpose and control. This focus on the work may also be a possible reason that the stressor from workplace had a stronger influence than PTSD on the employees' outcomes and well-being.

Another reason for job satisfaction could be understood through the qualitative findings, around the flexibility and understanding towards the context. In extreme cases, both managers and clients understood if employees could not perform or were absent. Absence was only discussed in the qualitative findings in this thesis. It had unique findings, where the managers willingly gave time off to employees; some even legitimised taking time off as they felt sympathy for the employees. Most of the managers' responses were self-justifying, stating that it was fair and right to give time off to employees. The most highlighted reasons for absence included not being able to come due to security blocks, attending funerals, evacuating building due to security concerns, or taking time/days off right after a blast.

#### ***9.2.4. Burnout***

Results regarding burnout are interesting because existing research in burnout-PTSD area, either shows that burnout and PTSD coexist (Cieslak et al., 2014) or that burnout causes PTSD. Cieslak et al. (2014) meta-analysis of burnout and PTSD, is the most recent meta-analysis on the two variables and it covers: helping, care and protection based professions such as forensic doctors, firefighters, nurses, rescuers and aid workers. In all such professions, the job itself exposes the incumbents to secondary or vicarious trauma.

In my research, the focus was on employees working in professions where they were not necessarily exposed to trauma as a part of their job, but terrorism was a factor outside of work. This provided a different dynamic, where job stress did not involve traumatization per se. Thus, the objective was to determine whether job stress and the added stress of living under on-going terrorism caused job burnout. Results showed that job stressors were more closely related to job burnout than PTSD where job burnout itself was not very high (emotional exhaustion and cynicism had mean scores 2.6 and 2.3) but at typical levels from western studies (Haar, Roche, & ten Brummelhuis, 2017; ten Brummelhuis, Haar, & van der Lippe, 2010). This shows that people were cynical and emotionally exhausted but not as much as one would expect under the circumstances. This appears counterintuitive given the high PTSD rates. A plausible explanation could be that people may be separating the work and personal life, in order to block the effects of terrorism. This is not uncommon among PTSD sufferers where avoidance is way a mechanism to

protect oneself from the extreme pain associated with the stress (Hovens et al., 1994). As discussed above people might find work a source of normality (de Rond & Lok, 2016), or that the terrorism environment is a constant therefore they are habituated towards it (Shalev & Errera, 2009; Shalev & Freedman, 2005). These are unique findings which need further exploration and research support.

#### ***9.2.6. Role of Perceived organisational support***

The qualitative study developed the contextual understanding of POS. It provided the insight that security was needed as a form of organisation support, where employees' wanted the organisations to provide physical security to them. This information came from the managers; therefore, it was important to know the perceptions of the employees. This led to the second study which showed robust results. With some confidence therefore, Security POS was included in the final study. The qualitative study provided the insight; the quantitative study confirmed the distinct nature of the Security POS in study 2 (quantitative) and the final study clarified its role in the context of terrorism. There are several studies on POS in terrorism context (Bader & Berg, 2013, 2014; Bader & Schuster, 2015; Bader, Schuster, et al., 2015) but none that appear to address contextualise POS as this research did. It appears as a simple and logical demand/expectation from the employees' perspective. Thus, the collective findings helped develop better understanding around the role of security and organisational support provided by organisations in the context of on-going terrorism.

#### ***9.2.7. Role of Psychological Capital***

Psychological resources (per se) did not surface as a buffer in the interviews (study 1). The qualitative study discussed the lack of hope, constant fear, trauma and emotional turmoil. These showed that employees were constantly emotionally taxed /drained. Thus, it led to seeking the role of PsyCap in the context, which is a pool of psychological resources, one which helps employees weather the storm. It helps employees to deal with stress and stressful situations effectively. More importantly, like social and intellectual capitals, it can be developed (Luthans, 2002; Luthans, Avey, et al., 2006; Luthans, Vogelgesang, et al., 2006; Luthans, Youssef, & Avolio, 2007). The quantitative study confirmed the role that psychological capital can play in

reducing the damaging consequences of stressor and PTSD. Pakistani samples also showed that the resilience of the population was not as high as compared to that of the population in Israel. My study findings thus add to the literature of PsyCap. Furthermore, this means that PsyCap can play an important role in helping Pakistani employees, thus pointing towards the significance of PsyCap interventions which are discussed in later sections.

#### ***9.2.8. Choice of Methods***

The above discussion validates the choice of methods. It can be seen that the qualitative and quantitative inquiries helped augment the understanding about the stressors and their influence on employees living under terrorism. In doing so, this research study adds to existing methodological approaches, by providing findings which can be contextually and meaningfully understood. For instance, most PTSD and POS, or social support studies have one type (quantitative) of data (Bader, Berg, et al., 2015; Besser & Neria, 2009; Hobfoll et al., 2008). My research reinforced that the choice of methods should be based on the requirements of the research questions, and resonates with Johns (2001; 2006) stated that the context in research should not be undermined, and that all research is contextually embedded (Johns, 2006).

#### ***9.2.9. Sample dynamics***

While not a focus of the thesis, there are some points around demographics that also merit attention. Female gender is often stated as a risk factor in cases of PTSD (American Psychiatric Association, 2013; Besser & Neria, 2009). However, neither in the qualitative nor in the quantitative study was gender seen to play a role in the context of this research. The consistency of the results in all the three studies gives confidence that the finding was not an artefact of the data collection method, or an error of chance. Furthermore, it might be explained that female in the samples for my studies were, educated and employed, making them different in relation to the studies of PTSD amongst citizens. The civilian population of women in PTSD studies often incorporate economically and socially disadvantaged groups; in such cases the risk of PTSD becomes higher (American Psychiatric Association, 2013).

Education is another risk factor for PTSD (Besser & Neria, 2009); thus, the females in my studies being educated might have mitigated in this case. Being educated and employed may

make them more empowered and better resourced than those conventionally involved in PTSD studies across the globe. For instance, meta-analysis of military population shows that gender does not play a role in case suffering from PTSD (Brewin et al., 2000). This argument could partially be used, such that being in military points towards women being better trained; becoming resilient, and more resourceful in managing the stress. The women in my research and those in the meta-analysis of the military forces are not comparable populations, yet the reasons of being more resourceful in terms of economic, social, or educational resources can be used to explain why the women in my study were no different than the men with regards to PTSD.

As part of the ethical requirements for this study, I was able to have a psychologist offer a free phone number to call if respondents had any issues, but none availed of this resource. This cannot thus be attributed to gender, or any particular factor, because the respondents were from different professions, ages, and so on. It is interesting to note that even those who had high PTSD did not consider seeking help. There could be several reasons for this. First, the questions did not upset the respondents, even those who had high PTSD. Second, the feeling and the symptoms of PTSD are so common that people consider them to be normal; therefore, they did not see a need. Third, they might be already seeking help from other sources. Finally, that they might not think it comfortable/ private or anonymous enough to connect with the counsellor. However, I also received no feedback from respondents complaining about the survey or about it raising any issues.

### **9.3. Limitations**

Despite every effort, there were several limitations to the research, discussed below.

#### ***9.3.1. Online data collection***

The MUHEC strongly pointed out that the researcher should not go in person to collect the data, but rather collect data using online tools. The risk to the life of the researcher was evident in the case of going in person. Thus, I was left with no option but to collect data online, although online data collection had its own disadvantages. For instance, only literate community in Pakistan could be tapped through online tools. This was a major limitation. Existing literature highlights that those belonging to low socio-economic groups have a higher likelihood of

suffering from higher levels of PTSD (Hobfoll et al., 2009; Shalev, Tuval, Frenkiel-Fishman, Hadar, & Eth, 2006). Since the low socio-economic group (employee population) was less likely to have computer access and computer literacy; and highly unlikely of having an internet connection; the population was left untapped. It is important because the existing study results show moderate to high levels of PTSD, it is worrisome and worth studying the impact stressors might have in the lives of the most vulnerable groups living under on-going terrorism.

### ***9.3.2. Cross sectional data***

As discussed in each article, all three studies were cross sectional in nature. The interviews were conducted with the managers only at one point in time. Considering the nature of the study, if the interviews would have been conducted more than once, for instance six months apart these would have then highlighted greater consistency and depth in the information. Similarly study two and three were cross sectional inquiries. Having longitudinal studies would have helped strengthened the findings (this is discussed in implications section 9.6 in more detail). However, in doing so, anonymity had to be compromised which was not allowed by the Ethics committee. As such, the additional empirical study provided some evidence of generalizability, for example, around the influence of Security POS.

### ***9.3.3. Single source and Self-report***

Self-reporting and single data sources are limitations that have been acknowledged in each of the studies (Podsakoff & Organ, 1986). The in-depth interviews with the HR managers were indeed insightful, but it is clear that other sources could have been used to strengthen my findings (e.g. using observation). Regarding the interviews, it is also highlighted that the managers' responses and views may reflect the overt behaviours of the employees and not necessarily the stressors they might be experiencing. About the self-report and single source in the quantitative studies, it is realised that employees may not be aware of PTSD yet be suffering from it. This again poses a limitation. Secondly, due to the nature and sensitivity of the data, ethical requirements demanded informant anonymity, due to which collecting other sourced data became more challenging. In all three studies, the self-report might have suffered from social desirability that is when the respondents/informants provide socially desirable answers rather

being truthful (Podsakoff & Organ, 1986). One of the reviewers from Personnel Psychology stated this objection regarding the HR managers, which may be a valid concern. However, looking at the data set, in the interviews it was clear that the managers did not paint a rosy picture, and did clearly state where the organisations were not supportive. Having three different sets of data pointing in the same direction provides some assurance of the reliability of the data. Nevertheless, these limitations are realised and acknowledged.

#### ***9.3.4. Data collection timing***

One ethical requirement was that data should not be collected immediately after a blast. This would ensure that those who are vulnerable are not targeted. Several iterations of communication took place between the researcher and the ethics committee to reach common ground regarding the respondents' sources and methods of recruitment. This was considered during interview schedules. Unfortunately, once questionnaires were floated, some incidents did happen which were out of control of the researcher. Ironically, the respondents did not mind filling the questionnaire. A possible reason could be that in case of self-selection several people who had friends or extended family lost to terrorism, self-selected themselves and filled the questionnaires. It can be explained through the qualitative study where it was found that people thought 'victims' were those who had lost someone in their own home (e.g. sibling, parent, spouse, child). Other losses were so common in some areas that the respondents' perceptions regarding victims were far more severe than normal. Repeated losses and exposure to trauma at time may make people feel that the 'stability in the instability' (Shalev & Errera, 2009; Weinberg, Besser, Campeas, Shvil, & Neria, 2012) is the 'new normal'(Bongar et al., 2007).

#### ***9.3.5. Sample***

The samples were taken from Pakistan. However, due to the size of the samples, (qualitative study n=15, quantitative study 1 n=146, quantitative study 2 n=416); there can always be a problem with non-representation. Therefore, if the samples were bigger, it would have given more confidence in findings (Field, 2016). Similarly, the sample did not have a control or comparison group. Again, that would have improved the findings of the study. Since the study was conducted in a natural setting and in a specific context, it was not possible to find entirely

unexposed Pakistanis. However, in future, expatriates who have lived for longer than a decade or other PTSD sufferers such as those of earthquakes can be used as comparative samples.

### ***9.3.6. Sampling technique***

Purposeful snowball sampling was used in the quantitative studies. It is a non-probability technique and criticised in quantitative studies (Biernacki & Waldorf, 1981). This criticism was known before conducting the studies. As mentioned, the study of trauma is such that it requires due diligence and care in terms of distress that might be caused by questioning. This was discussed at length during the ethics committee meeting, where the protection of the respondents was noted to be critically important. Thus, keeping the well-being of the respondents in mind, the sampling choice had to be purposive, using knowledge that only those who have not had a recent traumatic loss should be contacted. Similar instructions were given regarding forwarding the survey to others. Thus, every effort was made that no recent victim be targeted. This provided protection to the well-being of the targeted population who were of paramount importance. However, it did serve as a limitation.

### ***9.3.7. Lack of prior studies***

One of the key motivations for this study was that there were no prior studies on the area that I wanted to understand. However, the same issue serves as a limitation as well. Not having earlier studies meant the choices of the methods and measures were not necessarily the best ones. This makes it important that future researchers should address this challenge. For instance, the contextual POS highlights that other measures may also need contextual development. All measures were used in good faith, but it is always a limitation, which requires future studies to replicate the findings and confirm their generalizability.

## **9.4. Contribution to theory**

### ***9.4.1. Conservation of Resources Theory***

This research contributed to CoR, by using it as an overarching theory to explain job and contextual stressors and their effects on employees living under on-going terrorism. CoR in relation to terrorism has been mostly researched in western or Israeli context (Benight & Bandura, 2004; Canetti-Nisim et al., 2009; Canetti, Rapaport, Wayne, Hall, & Hobfoll, 2013; Hobfoll et

al., 2012; Hobfoll et al., 2009; Zeidner, Ben-Zur, & Reshef-Weil, 2011). My study provides insights for the usefulness of CoR in a non-Western context. It adds to CoR by using the theory in an extreme context and incorporating several resource depleting and replenishing sources such as job stressors, PTSD, PsyCap and POS. The theory was extended to understand the effects of these sources in an extreme context where 50% of the sample was above the mean scores of 2%. It helped understand that continuous resource depletion from extra-organisational stressors (terrorism) has implications for work stressors and their effects. These are pointed in section 9.4.2. The study also adds to CoR which mainly uses social support, by adding security-POS as a form of support, which can lead to resource gains. Thus, this study contributes to CoR theory and shows its importance in understanding the experiences of employees living under on-going terrorism.

#### ***9.4.2. Stress and PTSD***

My study presented a population where 50% of the sample had moderate to high levels of PTSD scores. That in itself is presentation of unheard voices in relation to their worklife. In job stress literature my study added to the hindrance challenge stressors framework by providing results regarding the nature and strength of the stressors in the context of the study. The research findings strengthened the importance of job stressors, by highlighting that, despite high rates of PTSD, the job and its associated stressors may play more important roles in the lives of employees, specifically regarding job outcomes. My study confirmed that hindrance stressors play similar role as found in western studies, however as discussed earlier the results around benefits of challenge stressors were different. It highlighted that the benefits of the challenge stressors may be compromised and minimised, when employees are continually stressed by an extra-organisational stressor, because it can deplete employee resources. Employee may be habituated or used to the stress of terrorism, but it is still a burden that cannot be ignored. This has wider implications for organisations around work design and stress, discussed later in implications (section 9.7.3).

The study further adds to the management/organisation science literature by building interdisciplinary research using PTSD and other management-oriented factors. This helps develop pathways for holistic models and insights. It also adds another extra-organisational stressor and

its impacts on employees. Several researchers have called for research in different (Johns, 2006) extreme (James, 2011b) and non-western context (Barkema et al., 2015), and to further research by venturing into inter-disciplinary domains (Pettigrew, 2005). This study adds to all the above gaps.

#### ***9.4.3. Organisational Support Theory***

The research added to OST with two key contributions. First, it highlighted the role of POS in the context of terrorism. Few studies on POS are conducted in non-western contexts, the support for OST in such an extreme context add to the theory. More importantly, the study found that employees wanted and expected that the organisation would provide support in the form of physical security (e.g. armed guards with bullet-proof jackets). This made way for extending organisational support contextually and theoretically. A contextual tool (Security-POS) was first developed and tested in a separate sample (N=146). Then it was used in a large-scale study (N=416). The consistency of the findings of the qualitative and quantitative studies reflected the strength and importance of the contextual understanding of the concepts. This is an important contribution to the theory of POS.

#### ***9.4.4. Positive organisational behaviour***

First my study adds to the POB literature by conducting a comprehensive research in a non-western context (Pakistan), where limited has been done so far (Abbas & Raja, 2015). Further it showed that PsyCap may play a vital role in the context of on-going terrorism. There is scant research beyond that conducted in Israel and other single incident studies discussed above. Thus, this research is one of a kind in using PsyCap in the context of ongoing terrorism and PTSD, and therefore extends the literature of POB. The study highlights that employees living under on-going terrorism, can benefit from PsyCap and it can help reduce the detrimental effects on employee outcomes. The importance of PsyCap in the context of ongoing terrorism is further highlighted in implications (sections 9.6 and 9.7).

#### ***9.4.5. Employee outcomes***

Another important contribution of this study is the holistic understanding it brings regarding the lives of employees working in a terrorism-afflicted area. The qualitative and

quantitative studies built the understanding that employees living under terrorism, may be habituated and used to it, similar to the ‘stability with the instability’ discussed above. On one side job satisfaction mean scores are above average, at the same time the turnover intentions are high. Often satisfied employees want to stay in the organisation (Tett & Meyer, 1993), but this might not be the case for Pakistani employees. Possibly because of the context of terrorism, employee feel resource depleted and burdened, therefore the benefits of challenge stressors for employee satisfaction or well-being are compromised.

Most of the studies that have looked at burnout and traumatic stress caused by work associated factors, and are seen as correlates or burnout as an antecedent of PTSD (for details please see meta-analyses by de Boer et al. (2011) and (Cieslak et al., 2014). However, this study looked at PTSD due to a contextual factor, and its impact on employee burnout. Since there are not many prior studies to compare therefore this study contributes to the literature of burnout with regards to the context. It calls for further research which is discussed in section 9.6.

## **9.5. Contribution to practice**

### ***9.5.1. Understanding of stressors for employees working in terrorist hit regions***

This study helps informs managers and organisations regarding the job stressors and PTSD and their effects on employee outcomes and well-being. Firstly, the large proportion of the employees having moderate to high levels of PTSD is a concern for the organisations. Secondly, the understanding that challenge stressors which are likely to motivate employees, did not have any positive effects on employee job satisfaction and didn’t reduce turnover intentions. It is thus important for the organisations to realise that too much work stress, even if it is challenging tasks which managers might think will be motivating, might lead to negative effects. With the PTSD and job stressors employees may develop health issues (Holdeman, 2009); employee well-being may be adversely affected, and they may even experience burnout. This can cause performance and other losses to the organisation (Harnois & Gabriel, 2000).

### ***9.5.2. Developing conducive work designs***

The research’s insights explain that, even though HR managers might design jobs thinking that incorporating challenging jobs will be beneficial for employees, the additional stress

may not be taken as a challenge; rather it might become a source of burden. This needs attention, suggesting that the organisation and HR managers might need to work with employees to examine not only job-related stressors and tasks, but also the situational factors around them. This might include offering flexible working hours, or working from home when possible, especially in offices which are located in high-risk zones. Flexible work arrangements have shown positive results for employee outcomes and well-being (Glass & Finley, 2002; Shockley & Allen, 2007). It may also mean developing work schedules with the provision for unforeseen events and absences due to the loss of immediate family member. Another possibility could be around increasing phone calls rather than physical calls for sales of products (e.g. banks selling credit cards or loans). This would be helpful for the security of both the organisation which is selling and the entity who is buying.

### ***9.5.3. Organisations helping employees***

The study findings imply that organisations operating in terrorism-afflicted regions can help employees by providing them with organisational support within and outside organisation. The physical security such as armed guards, vehicle and body scanners, and vehicle obstructions that can stop a bomb-filled vehicle from entering a building might give employees some peace of mind so that they can focus on their jobs without fear. However, it is plausible that, despite knowing that it is needed, the continuous checking and scanning may irritate people and the time that this activity takes may at times seem like a burden or obstacle to employees. Both above points were found in the interviews, and they highlight the complexity around POS that needs to be offered to the employees. The organisations will have to develop security checks in such a way that they do not interfere with the work and do not intimidate or irritate employees. This is a challenge because people have different threshold of fear and tolerance and what works for one may not work for another (Schneier, 2006).

### ***9.5.4. Psychological Interventions***

PsyCap turned out to be a buffer for the detrimental outcomes of stressors. This highlights that organisation which provides intervention programmes might be able to have employees with better PsyCap, thus leading to conservation of resources. Luthans et al. (2015) have developed a

useful PsyCap-building programmes which can be introduced by organisations. This could help enhance employee well-being and lead to better job and employee outcomes. The micro intervention programme of PsyCap (Luthans, Avey, et al., 2006; Luthans, Avey, & Patera, 2008) has small activities which can be conducted within organisations, which can enhance hope, optimism, efficacy and resilience. This may lead to sustainable initiative by the organisations to help their employees and in turn benefit the organisation. This is in particular important for those living under terrorism because; first their psychological resources are constantly getting depleted; thus the intervention can help employees regain some of the lost resources. Second, PsyCap helped reduced the adverse effects of job stressors and PTSD on employees' well-being, therefore such interventions can help employees' well-being, which creates a win-win situation.

#### ***9.5.6 Wider community***

On-going terrorism adds to workplace perils because there is a brain drain, reduced foreign projects and less foreign investment. Various businesses shrink their footprints and several multinationals retrench their presence in Pakistan. The overall effects of terrorism are much larger and far-reaching beyond a specific incidence. One of the effects of terrorism is migration. A large number of people are migrating in search of peace. Those who are exposed to traumatic experiences can find it difficult to focus and may have flashbacks which affect the overall well-being of the employee, and can lead to performance losses and accidents (American Psychiatric Association, 2013). International organisations can use the findings to help (both) employees and organisations to better deal with the stressors e.g. by having high levels of security in terms of guards' strict security protocols when operating in terrorism-afflicted countries. International organisations operating in peaceful countries, as hosts to migrants/expatriates from terrorism-afflicted countries; they should provide PTSD screening and options for counselling services or guidance regarding the available choices to seek help; awareness programmes regarding the post-trauma stress; developing in-house support groups to share the grief, and losses. This will be beneficial for both the employees and the employers.

## **9.6. Implications for theory**

In theory, we first state the research that can be further done in the areas that were studied in this research. Then highlight some of the other possible areas that can be researched relating to terrorism and management science. The list is indicative rather than exhaustive if areas for future theory development.

### ***9.6.1. Job stress, PTSD, and employee outcomes***

More research is needed in the challenge hindrance framework in unique contexts, such as on-going terrorism. As my study findings were contradicting the beneficial nature of challenge stressors, it highlights that there is a need to do more research to develop generalisations. Future research could look at other stressors such as dual earners in a family which increase the overall risks for the families. The more family members work, the more people have to go out of the house, and be in crowded places, such as traffic signals, and thus more is the risk and stress. This added stress could be studied in relation to job and terrorism stress. For instance, will it reduce stress if one is working from home, or if the spouse, or family member is working from home? How different are the levels of stress experienced by employees who have other members working out of homes, compared to those who do not? Also, how far does being a single earner living under terrorism affect the employee with regards to loss of life and leaving dependents behind, or how far does this stress spill-over to work? Furthermore, other outcomes (e.g. life satisfaction, team work, intrinsic work motivation) could be studied in the context of terrorism.

Future studies could look at burnout as a mediator with other job outcomes such as satisfaction and performance. (Yao et al., 2015) suggest that burnout could be considered a significant mediator in the stress–outcome relationship. This might be particularly useful when exploring the life satisfaction of citizens from Pakistan. Taking a step further, PTSD and job burnout could be tested in path analysis to determine the effects these can have on each other and other outcomes.

Job satisfaction as discussed earlier showed similar quantitative results as compared to the global averages, but different qualitative explanations, as compared to the literature. This could be further investigated. The possibility of having a choice to leave may be seen as a

moderator, this means that those who choose to stay may not be dissatisfied. According to cognitive evaluation theory (CET) (Deci & Ryan, 1985) the freedom to choose makes one intrinsically motivated towards the job. Guest (2004) showed that voluntary and non-voluntary employment choices create differences in how people feel about their job. Thus, the voluntary and non-voluntary employment choices could be also studied from the lens of CET in the context of terrorism.

Future studies could also be conducted to understand the effects on employees, especially those who have face to face encounters with terrorism; their voluntary behaviours may be a means of calibrating their stress threshold/level. For instance, absence and turnover may be legitimised, as did many of the interviewees in study one. The literature has mainly looked at employee legitimising absence (Gibson, 1966) and in some cases absence reporting (Johns & Xie, 1998); it would be interesting to understand managers' legitimisation of employee absence in the context of terrorism. This may prove to be insightful for organisations, as all managers acknowledge that absence caused loss of work and performance. On the other hand, employees' legitimisation of absence in the case of living under on-going terrorism can be studied using a moral licensing view (Klotz & Bolino, 2013) which does not appear to have been used in this context but would be a useful lens. Moral licensing (Bolino & Turnley, 2005; Klotz & Bolino, 2013) argues that employees who engage in good behaviours then find it legitimate to engage in immoral behaviours. It will be useful to see whether good performers would use incidences of terrorism to legitimize their unnecessary/avoidable absence. Thus, moral licensing could be used as a lens to understand the legitimisation of behaviours such as, managers allowing employees' time off, or employees doing minor deviant behaviours, such a rudeness or anger outbursts.

### ***9.6.2. PsyCap and POS***

These two have shown to be useful in the context of ongoing terrorism; they merit more attention in future studies. Studies could look at other employee outcomes such as life satisfaction, and subjective well-being. These could also be used to study objective performance indicators such as productivity of the person and organisation. Such studies would help the growth of theory.

### ***9.6.3. Similar contexts***

Studies can be carried out in similar contextual regions such as Iran, Iraq, Afghanistan and other terrorism hit countries where employees carry on with their everyday lives bearing the stress of threats of and exposure to terrorism. As Triandis and Suh (2002) explain, the convergence of research first in a similar context and then finding convergence or divergence in the dissimilar context is important for research.

Vulnerable groups such as those with low education, overall low social economic, people with disabilities due to terrorism, minority (religion) groups; could be studied in the context of on-going terrorism. These groups would be suffering from double jeopardy thus the implications may be more severe for them.

### ***9.6.4. Extending beyond the study variables***

There are numerous studies on terrorism, trauma and suffering (Ai et al., 2006; Bell, 1995; Benight & Bandura, 2004; Besser & Neria, 2009; Braverman, 1992; Byron & Peterson, 2002; Columbus, 2006; de Boer et al., 2011; DiGrande et al., 2011; Ehlers & Clark, 2000; Faust & Ven, 2014; Flannery, 1990; Greenberg, Brooks, & Dunn, 2015; Grieger, Fullerton, & Ursano, 2003; Hobfoll et al., 2007; Hobfoll et al., 2012; National Institute for Health and Clinical Excellence, 2005), which can be used as a starting point by management science scholars. Thus, several areas could be researched relating on-going terrorism and work-life of employees. For instance, fear due to terror, gratitude (Ai et al., 2005), overall mental health and well-being which has been studied in case of one-time terrorism incidents (Hill, 2009), can be studied in the context of on-going terrorism. Perhaps gratitude plays a moderating role in relationships, for example employees with high stressors but high gratitude (around having a job?) might buffer the detrimental effects. These types of relationships can empirically and theoretically extend our understanding. I discuss a few concepts as an example to point towards the variety of areas where this research can be extended. I discuss political extremism, terror management theory, altruism born out of suffering, and creativity as the examples.

#### ***9.6.5. Political extremism and exclusion***

The study of political extremism and exclusion attitudes also provide support to the same argument but from a different perspective. Canetti-Nisim et al. (2009) suggest that personal exposure to terrorism and extreme distress for a prolonged period of time leads to non-democratic attitudes towards minorities. The base of the argument is that people generally develop “us” and “them” attitudes, where anyone who is not a part of “us” is categorized as “them”. Minorities are easy to be categorized as “them” thus there is negative attitude towards them. Inferring from the above arguments employees in organisation would be likely to be negative towards those who are not a part of their “ingroup”. Thus, this may cause more stress in the workplace. Therefore, it is likely that employees living under terrorism discriminate more and hold greater prejudices towards those who hold worldviews different from their own (Pyszczynski, 2004; Pyszczynski, Rothschild, & Abdollahi, 2008). What would be the possible implications of studying employees from the lens of ‘ingroup’-‘outgroup’ categorisation developed due to exposure to terrorism? How may PsyCap help in reducing the stress and diluting the effects of terrorism?

#### ***9.6.6. Terror management theory***

Terror management theory discusses that human are in constant struggle between the desire to live and the knowledge of the inevitability of death (known as death salience) (Greenberg & Arndt, 2011; Greenberg et al., 1990; Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989). In this struggle, people derive meaning by belonging to a cultural worldview. Over time humans have created culturally embedded world views. Each person from early life grows developing and adapting to a particular world view. When mortality becomes salient, people become positive towards those who validate their world views and vice versa. If they live up to their cultural values they feel high self-esteem, which enables them to feel worthy in this life. Whether they believe in after life or not, the self-esteem helps them attain immortality either via better after life or by becoming immortal by the deeds done in this world. Thus, cultural worldview and self-esteem help in dealing with the anxiety of death salience (Greenberg & Arndt, 2011; Greenberg et al., 1990; Rosenblatt et al., 1989). TMT and death salience provide a unique lens to understand how job stressors and PTSD may lead to detrimental consequences when one

is constantly reminded on his death. Does that make an employee fearless, selfish and careless, or anxiety stricken thus collapsing? Can PsyCap help in reducing the anxiety caused by death salience, which may be an everyday reality for employees living under terrorism? It is not yet known.

#### ***9.6.7. Altruism born out of suffering (ABS)***

Another view which can be used to understand employee behaviour and attitudes while living under constant exposure to terrorism is “altruism born out of suffering (ABS)” (Staub & Vollhardt, 2008). If people who suffered were able to have a healing process they are likely to be able to deal with their trauma and become empathetic towards others. They may start caring for those who have suffered like them (Vollhardt, 2009). This valuing of the human connection in pain, leads to ABS. The basic premise of ABS is that trauma and suffering do not always bring out negativity in people, but it can also lead to prosocial and altruistic behaviours. “ABS is distinctive with regard to at least three foci: its focus on victimization (i.e. intentional harm doing), on the prevention of violence, and on the generation of positive psychological changes that lead to helpful action” (Staub & Vollhardt, 2008, p. 270). Building on these concepts, employees might be more helpful, prosocial and altruistic towards others. In such cases the sufferers being employees may become helpful and go beyond their calls of duty to help their colleagues. These could be displayed as organisational citizenship behaviours and /or better performance by the employees. In addition, it might lead to better tolerance and less discrimination. Both PsyCap and POS may be resources that can help employees heal, thus more studies need to be done around PsyCap and POS role in the healing using the ABS. Further how far these can mitigate the negative outcomes of job and terrorism stressors? These questions can help build theory and help organisations.

#### ***9.6.8. Creativity***

Most intelligent and evil ideas are someone’s out of the box thinking. Due to its illusive nature, creativity is not widely researched (Amabile, Barsade, Mueller, & Staw, 2005). There is limited research about traumatic experiences that affect creativity (Knežević & Ovsenik, 2002). Similarly, creativity in case of war or terrorism has also not been researched widely. There exists

support for positive relationship between acute stress and artistic creativity (Akinola & Mendes, 2008) but such support does not exist in the context of organisational behaviours. In addition to that, job stress and creative performance have a double-edged relationship. Factors such as uncertainty gel well with creativity but increase stress. By this token high stress will lead to high creativity, but dysfunctional stress reduces a person's ability to use him/herself as an effective resource (Hobfoll, 1989). Thus, creativity is not always positive, and that divergent thinking can lead to dishonesty and its justification in novel ways (Gino & Ariely, 2012). There is a possibility that dishonest people think more out of the box than the honest ones; or the creative people in their out of the box thinking, may drift towards novel but deviant means of solving problems. With the complexity around the relationship of creativity with stress and trauma, it will be interesting to extend hindrance-stressor framework to relate with creativity, in the context of terrorism. To my knowledge no one has ever looked at it in the said context.

#### **9.6.9. Method**

Future studies could look at longitudinal design. Given the challenging nature of the context and the inherent sensitivities embedded in it, using methods such as observations or ethnographies may be useful but challenging as these may be emotionally taxing, and may cause secondary trauma. Such methods also involve risk to life. Keeping the well-being of the researcher under consideration, and the ethics involved in the process, conducting such a research may be highly complex.

Future studies could look at PTSD over time, to determine the effects of terrorism on outcomes. PTSD could be studied longitudinally like the study on Israeli population conducted by Hall, Saltzman, Canetti, and Hobfoll (2015), it could be done after at least six months to one year. Limited research mainly in the western (single incident) or Israeli context is available in this domain. Comparative studies of organisations with high levels of POS/ Security-POS and low levels of POS/ Security-POS and their buffering effects towards employee outcomes could be another area to extend OST. PsyCap and more specifically its interventions could be studied longitudinally to see the benefits of the interventions in the context of ongoing terrorism over time. This would add to the POB and strengthen its utility.

## **9.7. Implications for practice**

With my PhD, my hopes are not only to make original theoretical contribution, but also to be able to provide applied aid in the areas where psychological interventions rarely reach. Practical implications are considered for the organisations, terrorism-afflicted countries, New Zealand and international community. These are presented below:

### ***9.7.1. Terrorism-afflicted countries***

The numbers of people being traumatized in a certain region has implications for the organisations working in those regions. These include both local and multinational organisations. The organisations should have sustainable programmes to diagnose and treat people suffering from PTSD and its effects.

### ***9.7.2. Physical Security***

Organisation could collaborate with one another in building security networks to protect employees. It will help organisations to save lives of the employees, and in return have better satisfied employees. The employees would view the organisation as caring; by the norm of reciprocity they might be perform well. It will also be able to save the organisation from financial losses by having fewer losses to life and property.

### ***9.7.3. Work design***

Organisations can create work designs where the challenge stressors do not become burden for employees. This would require working with the employees and developing designs in which employees could have the flexibility to work in such a way that they can optimise their outputs. Reducing unnecessary pressures may also help. For instance, one manager (informant) working in a risky area had explained that his staff was called for training on a weekend, to the capital city (which was safer). More than 50 people had to go to another city to attend the training and come back on Sunday, and then go to work on Monday. The training was conducted by only two trainees. The manager and the staff felt resentful why the two trainers didn't come, and caused inconvenience to so many. Trainers feared for their lives therefore they didn't want to come to the risky zone. This is a common example, where both parties have genuine issues. The organisations would need to be mindful of the demands of both the parties and find amiable ways

to resolve such issues. Such as video training programmes, and interactive online courses to help both the trainers and trainees have more flexibility around mobility.

#### ***9.7.4. Psychological interventions***

Psychological-Interventions can be useful; but they need to be developed in some sustainable manner so that organisations can help build employees psychological capital. Luthans et al. (2015) have a comprehensive intervention program that the organisations can use to develop better PsyCap of the employees.

A bigger question is how far can the managers be free of the stress of terrorism when they operate in the same context? Can they assist employees in the process of job redesign or well-being? It is vital in this context that every now and then if the organisation can afford, to have a well-being review conducted by independent organisations which are not operating in the same context. Such collaborations might lead to develop understanding regarding the sufferings of the employees working in extreme contexts and thus lead to fruitful outcomes for.

#### ***9.7.5. Migrants***

A significant number of Pakistani migrants in UK, Canada, USA, Australia and New Zealand can also be tapped for a similar study. International Organization for Migration (2014) shows more than one million Pakistanis who have migrated to countries mentioned above. Such people go to foreign countries to study or work and are often unaware of the baggage of stress that they are carrying. This is not only true for Pakistan but several other terrorism affected countries. The irony is that the host country and the organisations that take them in are also likely to be unaware of it. For such people, countries with peaceful environment, open to immigrants with policies that are lenient for settlement after completing education are the most viable destinations. Thus, research projects should be initiated across the globe to find the prevalence of PTSD in students, immigrants, & refugees. Further organisational relevant/employee outcomes should be studied as well.

#### ***9.7.6. New Zealand immigration policy***

There are several implications for New Zealand. The government needs to create a balance between the choice of providing a safe and peaceful environment to people coming from

terrorism affected countries; and managing the burdens of stress and trauma that they bring with themselves. The immigration policies may have to consider how to deal or differentiate between the immigrants coming from peaceful countries and the immigrants who are coming from terrorism affected countries. This differentiation would help develop intervention programmes for early diagnosis of suffers from acute stress or PTSD. Next, have sustainable programmes so that both the immigrant and New Zealand can benefit from the skills and knowledge of the immigrant rather than suffer from the burden of the trauma of terrorism.

#### ***9.7.7. International organisations***

Terrorism is not the problem of one country or in one country. The burdens of stress and trauma of terrorism is no longer a problem affecting only the terrorism affected countries; the implications extend far beyond. The continuous influx of migrants and refugees brings the burden across countries and ultimately into workforce (Gambino & Jalabi, 2014). This makes it a global issue with implications for all organisations. The migrant and expatriate workforce, the multinational organisations, and the intervention agencies, should collaborate to attain better well-being for the work force. This creates not only an advantage for the organisation but can be a win-win situation for all involved in the process.

#### ***9.7.8. Health issues***

Although the purpose of this research was not to address the physiological aspects associated with PTSD nevertheless the prevalence of PTSD in the sample deems it important that it be discussed. McFarlane (2012) (in the long-term costs of traumatic stress intertwined physical and psychological consequences) explains that repeated exposure to traumatic events can increase the risk for PTSD. McFarlane goes on to say that with increasing rate of PTSD people are likely to have more cardiovascular diseases and may also increase obesity due to their physiological effects. The regions where terrorism is rampant PTSD may have long term implications; it can become a big concern for countries and their national health systems and budgets.

#### ***9.7.9. Public-Private collaboration***

Lastly, with the help of existing non-profit institutions/NGOs operating in war struck countries, PTSD & employee outcomes can be studied and initiatives at global level can be

evolved & applied. It could bridge the gap and look into multiple disciplines and be truly interdisciplinary, which can further lead to, development of center of PTSD and Employee Studies at the university level, highlight PTSD as a variable of study in the employee well-being literature, creation of a special interest group and symposium at forums such as Academy of Management, British Academy of Management & Australian and New Zealand Academy of Management.

### **9.8. Conclusion**

There has been limited research within the management science literature on terrorism and trauma and its relationship with work. It is a unique but challenging subject area, which requires collaborations and understanding of other subject domains (Pettigrew, 2005). Researchers have made calls to address this gap (Bader, Schuster, et al., 2015; James, 2011a; Toker et al., 2015), and to the best of my knowledge this is one of the few studies to look at this phenomena in this contextual setting.

The purpose of this research study was to explore and comprehend terrorism as an extreme stressor. There were two broad questions: (1) To develop understanding towards job and terrorism stressors, and their influence on employee outcomes. (2) To determine how personal resources such as PsyCap and organisational resources such as POS might help reduce the negative consequences of the stressors. Pakistan provided a unique opportunity to understand this phenomenon in natural setting.

The study first explored the nature and interplay of job and terrorism stressors, and their influence on employee behaviours. In doing so it highlighted the most salient employee outcomes in the context. It underscored the importance of the stress of terrorism, and indicated the prevalence of PTSD in the employees. This provided confidence and direction to test the relationship of job stress and PTSD with employee outcomes. The qualitative study also pointed out that the nature of perceived organisational support was different from that which is already known. Thus, before testing the stressors and employee outcomes relationships, it was considered prudent to develop and test a contextual measure for POS.

Then in the second study, I developed the contextual measure of POS which was security related. This study was quantitative in nature, its findings were that the security-POS was distinct

from the existing POS, and related significantly with employee job and well-being outcomes. The third and final study was based on the findings from the first two studies. This study tested the relationships of job stress and PTSD with employee outcomes, and determined the mediating and moderating roles of PsyCap and POS.

Interestingly, the levels of PTSD were found to be higher than in previous studies. However, the hindrance stressors from one's work were stronger predictors of employee outcomes and challenge stressors acted as added burdens rather than sources of motivation. PsyCap helped reduce the harmful effects of the stressors on employee job satisfaction, and turnover intentions. POS and Security-POS helped reduce the negative effects of the hindrance stressors on cynicism.

The study makes several significant contributions to the literature on CoR, stress and the challenge-hindrance stressors framework, POB and OST by providing contextually embedded findings from an extreme context. The present study highlights the importance of focusing on a wide range of stressors, such as PTSD due to terrorism. Overall, this thesis provided practitioners a lens to understand the stress employees experience in the context of on-going terrorism. Beyond Pakistan, these findings may help people working in other terrorism-afflicted countries. Broadly, it also points that international organisations and governments/communities of other countries need to realise that the expatriates and immigrants from terrorism affected regions may be carrying their burden of trauma, which can have implications for the employee, organisations and the communities at large.

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## **Appendix A: Information Sheet for HR and line managers**

**Research Topic: Exploring the relationship of Job Stress and extreme extra organizational stressor: The role of personal and organizational resources on employee outcomes**

### ***Researcher(s) Introduction***

I am Fatima Ali Junaid, currently a PhD candidate from Massey University, New Zealand. I am conducting a research project for my PhD thesis on employees in Pakistan under supervision of Professor Jarrod Haar and Dr. Darryl Forsyth, School of Management, Massey University, New Zealand.

### ***Project Description and Invitation***

The project aims to determine the role of job and terrorism based stress on employee outcomes. The project will involve interviews with HR and line managers for their perception job stress and stress due to terrorism in the employees in the organization, and its influence on their behaviours and attitudes.

### ***Participant Identification and Recruitment***

This research project will focus on employees throughout KPK and FATA in Pakistan. The project aims to recruit 12-15 HR/Line managers from organizations in KPK/FATA region in Pakistan for detail interviews. This number of participants is needed for the methods of analysis selected for the project. Participants will be selected based on personal contacts and their willingness to participate. The project will not seek any personal information from the participants. The project will ask for information regarding how employees feel due to terrorism in the region, this might make participants a little uncomfortable or sad in responding to the questions. There are no other risks of harm from the research project.

### ***Project Procedures***

For interview: I will use personal contacts and references, to make initial contact with HR/Line managers to request for interview. Those who will agree I will take an appointment for electronic meeting to have an interview for 10-30 minutes.

I will also provide a helpline in case participants wish to use the help.

### ***Data Management***

All data will be kept confidential and used only for the research project. The data will be processed by me under supervision of my two supervisors. All data will then be

destroyed at the end of the research project. The project findings will be compiled for a PhD thesis which will be submitted for the final examination. There will be no specific participant identity appearing in the thesis and thus, confidentiality of identity will be preserved.

### ***Participant's Rights***

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- Decline to answer any particular question;
- Withdraw from the individual interview at any time as you wish, before completion of the interview with you;
- Ask any questions about the study at any time during participation;
- Be provide with information on the understanding that your name will not be used in the research;
- Be given access to a summary of the project findings when it is concluded.
- Ask for the recorder to be turned off at any time during the interview.

**Appendix B: Participant Consent Form – Individual (HR /Line Managers Interview)**

**Research Topic: Exploring the relationship of Job Stress and extreme extra organizational stressor: The role of personal and organizational resources on employee outcomes**

I have read the Information Sheet and have had the details of the study explained to me.

My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree to the interview being sound recorded.

I agree to participate in this study under the conditions set out in the Information Sheet.

**Signature:**

**Date:**

.....

**Full Name - printed**

.....

## Appendix C: Survey for Study 2

(Survey monkey screen shots)



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## TE KUNENGA KI PŪREHUROA



Welcome and thank you for responding to our invitation.

As noted in the email, we are conducting a study of employees exploring a number of aspects relating to work experiences, and we are sincerely asking for your participation. Your participation involves completing the following survey, which is expected to take most people approximately 7 minutes to complete. Your participation in the research is completely voluntary. Please be assured that any responses will be treated with the utmost confidentiality and we are collecting no names, hence, you will never be personally identified. All completed surveys will be kept in a safe and secure location in my supervisors office for a period of 3 years, after which they will be destroyed. Only aggregate data will be provided for research and publication purposes. Please be aware there are no right or wrong answers to the questions asked – just circle the number that corresponds closest to what you feel or agree/disagree with. If you have any questions or concerns about this study, please contact Professor Jarrod Haar at [profjhaar@gmail.com](mailto:profjhaar@gmail.com). Remember, I will not know your name so rest assured every answer remains confidential! No one except the researchers will see your answers. Thank you for your support.

This project has ethics approval from The Research Ethics Office (Massey University, APPLICATION – MUHECN15\_031). Professor Jarrod Haar and Fatima Junaid are responsible for the ethical conduct of this research. If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Dr Brian Finch, Director, Research Ethics, Telephone: +64 (06) 356 9099 ext. 84459, email [humanethics@massey.ac.nz](mailto:humanethics@massey.ac.nz) You do not have to participate and can stop the survey at any time. We appreciate that surveys can be onerous and we have tried to make them as brief as possible while still being comprehensive.

Should you decide to participate you have the right to:

- Decline to answer any particular question.
- Ask any questions about this research project at any time during participation.
- Provide information on the understanding that you will remain anonymous.
- Be given access to the completed research report.

Please feel free to contact the researcher directly if you have any questions or comments.

Thank you for your time and effort.

Yours sincerely

Fatima Junaid  
PhD Candidate  
Massey Business School  
Massey University  
Albany  
Email: [fatimaajunaid@gmail.com](mailto:fatimaajunaid@gmail.com)

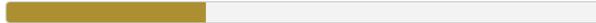
Professor Jarrod Haar  
Professor in Management  
Auckland University of Technology  
Email: [jarrod.haar@aut.ac.nz](mailto:jarrod.haar@aut.ac.nz)

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### 1. Please answer the following about yourself...

	Gender	Age	Marital Status	Parental Status	Highest Education Level
What is your:	<input type="text"/>				

### 2. Please answer the following about your work...

	Tenure in your organisation (years)	Tenure in your current job (years)	Average hours worked per week	Are you part of a union	What sector do you work within?	Are you self-employed?	Is your job a position of authority (e.g. foreperson, supervisor, manager)?	What industry do you work in?
-	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

### 3. Please answer the following:

What is your current job title:

How many employees are employed in your firm (approximately):

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4. The following questions relate to you...

	1-Strongly Disagree	2-Disagree	3-Neither Disagree or Agree	4-Agree	5-Strongly Agree
My work keeps me from my family activities more than I would like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The time I must devote to my job keeps me from participating equally in household responsibilities and activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have to miss family activities due to the amount of time I must spend on work responsibilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The time I spend on family responsibilities often interfere with my work responsibilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The time I spend with my family often causes me not to spend time in activities at work that could be helpful to my career	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My work keeps me from my family activities more than I would like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I am satisfied with my work-life balance, enjoying both roles	<input type="radio"/>				
Nowadays, I seem to enjoy every part of my life equally well	<input type="radio"/>				
I manage to balance the demands of my work and personal/family life well	<input type="radio"/>				
Most days I am enthusiastic about my work	<input type="radio"/>				
I feel fairly satisfied with my present job	<input type="radio"/>				
Each day at work seems like it will never end	<input type="radio"/>				
I find real enjoyment in my work	<input type="radio"/>				
I consider my job rather unpleasant	<input type="radio"/>				
Having fun at work is very important to me	<input type="radio"/>				
If my job stopped being fun, I would look for another job	<input type="radio"/>				

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5. Please tick the number that best represents your opinion relating to the following items.

	1-Strongly Disagree	2-Disagree	3-Neither Agree or Disagree	4-Agree	5-Strongly Agree
My organization values my contribution to its well-being	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization fails to appreciate any extra effort from me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization would ignore any complaint from me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization really cares about my well-being	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Even if I did the best job possible, the organization would fail to notice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization cares about my general satisfaction at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization shows very little concern for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization takes pride in my accomplishments at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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6. The following questions relate specifically to terrorism-related acts in your workplace...

	1-Strongly Disagree	2-Disagree	3-Neither Agree or Disagree	4-Agree	5-Strongly Agree
My organization values workplace security	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization provides armed security at my workplace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel safe in my workplace from the threat of terrorism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization takes terrorism-related concerns seriously	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel safe at my workplace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Management acts quickly to correct safety problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Corrective action is always taken when management is told about unsafe practices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my workplace managers/ supervisors show interest in my safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managers and supervisors express concern if safety procedures are not adhered to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Management clearly considers the safety of employees of great importance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe that safety issues are not assigned a high priority	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Safety procedures are carefully followed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Management considers safety to be equally as important as production	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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## TE KUNENGA KI PŪREHUROA

Thank you for your time and effort.

Please feel free to contact the researcher directly if you have any questions or comments.

Thank you for your time and effort.

Yours sincerely

Fatima Junaid  
PhD Candidate  
Massey Business School  
Massey University  
Albany  
Email: fatimaajunaid@gmail.com

Professor Jarrod Haar  
Professor in Management  
Auckland University of Technology  
Email: jarrod.haar@aut.ac.nz

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## **Appendix D: Information Sheet for employees**

**Research Topic: Exploring the relationship of Job Stress and extreme extra organizational stressor: The role of personal and organizational resources on employee outcomes**

### ***Researcher(s) Introduction***

I am Fatima Ali Junaid, currently a PhD candidate from Massey University, New Zealand. I am conducting a research project for my PhD thesis on employees in Pakistan under supervision of Professor Jarrod Haar and Dr. Darryl Forsyth, School of Management, Massey University, New Zealand.

### ***Project Description and Invitation***

The project aims to determine the role of job and terrorism based stress on employee outcomes. The project will involve interviews with HR and line managers for their perception job stress and stress due to terrorism in the employees in the organization, and its influence on their behaviours and attitudes. The project will extend to survey of employees regarding job and terrorism based stress and employee outcomes. I hope that you would find this research project interesting and would like to participate in the project.

### ***Participant Identification and Recruitment***

This research project will focus on employees throughout KPK and FATA in Pakistan. The project aims to recruit 175-200 employees for survey. This number of participants is needed for the methods of analysis selected for the project. Participants will be selected based on personal contacts and their willingness to participate. The project will not seek any personal information from the participants. The project will ask for information regarding how employees feel due to terrorism in the region, this might make participants a little uncomfortable or sad in responding to the questions. There are no other risks of harm from the research project.

### ***Project Procedures: Survey***

Firstly, based on personal contacts and via posting the surveymonkey link on my facebookpage, participants will be recruited.

- I will email the survey participants and provide a surveymonkey link, which will make the response anonymous.
- The emails to the survey participants will also have the questionnaire attached in the email, which will explicitly state that it should be returned to the email address of the supervisor rather than the researcher. This choice is given because of the power cuts on daily basis in Pakistan, make the internet availability

difficult. Thus respondents can download, save and respond at their convenience.

- The respondents will have a choice to use the survey monkey link, or respond by filling the questionnaire, and emailing it back to the researcher's supervisor, to ensure anonymity.
- I will post the survey monkey link to the questionnaire, on my facebook page; briefly explaining my research. On the link the respondents will be encouraged to post it on their networks if they think there may be anyone who might be interested in the survey. It will explicitly state that it is voluntary to participate and completely confidential.
- Only those who agree they will participate in the survey.

This will take about 20-25 minutes to complete. It will also provide a helpline in case participants wish to use the help.

### ***Data Management***

All answered questionnaires' data will be kept confidential and used only for the research project. For those participants who are not using survey monkey, they are requested to return the questionnaire to the email address (of Jarrod Haar) provided on the questionnaire, who is my supervisor. He will email me only the questionnaire and thus the identity of the respondent will be concealed from me. The data will be processed by me under supervision of my two supervisors. All data will then be destroyed at the end of the research project. My supervisor will be responsible for the data storage and destruction. The project findings will be compiled for a PhD thesis which will be submitted for the final examination. There will be no specific participant identity appearing in the thesis and thus, confidentiality of identity will be preserved.

### ***Participant's Rights***

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- Decline to answer any particular question;
- Withdraw from the employee survey at any time as you wish before returning the answered questionnaire
- Be given access to a summary of the project findings when it is concluded. The questionnaire provides a link which will be active on (xx.xx.xxxx), it will provide the key findings of the research.
- Completion and return of the questionnaire implies consent.

## Project Contacts

<b>Fatima Ali Junaid</b>	<b>Prof. Jarrod Haar</b>	<b>Dr. Darryl Forsyth</b>
PhD candidate	Chief supervisor	Second supervisor
School of Management	School of Management	School of Management
Massey University	Massey University	Massey University
Private Bag 102904	Private Bag 102904	Private Bag 102904
Auckland 0745	Auckland 0745	Auckland 0745
New Zealand	New Zealand	New Zealand
T.: +640212074556 (NZ)	T: +64094140800 ext. 43392	T: +64 (09) 414 0800 ext. 43383
E: <a href="mailto:f.junaid@massey.ac.nz">f.junaid@massey.ac.nz</a>	E: <a href="mailto:j.haar@massey.ac.nz">j.haar@massey.ac.nz</a>	E: <a href="mailto:D.Forsyth@massey.ac.nz">D.Forsyth@massey.ac.nz</a>
<a href="mailto:Fatimaajunaid@gmail.com">Fatimaajunaid@gmail.com</a>		

## Compulsory Statements

1. **APPLICATIONS TO A REGIONAL HEALTH & DISABILITY ETHICS COMMITTEE**  
Use the approval statement from the relevant Health & Disability Ethics Committee:
2. **MUHEC APPLICATIONS**  
**The following statement is compulsory and MUST be included:**

### Committee Approval Statement

*Select the appropriate statement:*

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application \_\_/\_\_(insert application number). If you have any concerns about the conduct of this research, please contact Dr Andrew Chrystall, Chair, Massey University Human Ethics Committee: Northern, telephone 09 414 0800 x 43317, email [humanethicsnorth@massey.ac.nz](mailto:humanethicsnorth@massey.ac.nz).

**Appendix E: Participant Consent Form –Individual (Employees Questionnaires)**

**Research Topic: Exploring the relationship of Job Stress and extreme extra organizational stressor: The role of Psychological Capital & Perceived Organizational Support on employee outcomes**

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

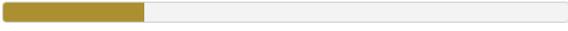
I agree to participate in this study under the conditions set out in the Information Sheet.

**Signature:** ..... **Date:** .....

**Full Name - printed** .....

## Appendix F: Survey for Study 3

### Survey Monkey Screen Shots



Welcome and thank you for responding to my invitation.

As noted in the email, we are conducting a study of employees exploring a number of aspects relating to work experiences, and we are sincerely asking for your participation. Your participation involves completing the following survey, which is expected to take most people approximately 15-20 minutes to complete. Your participation in the research is completely voluntary. Please be assured that any responses will be treated with the utmost confidentiality and we are collecting no names, hence, you will never be personally identified. All completed surveys will be kept in a safe and secure location in my supervisor's office for a period of 3 years, after which they will be destroyed. Only aggregate data will be provided for research and publication purposes. Please be aware there are no right or wrong answers to the questions asked – just check the response box that corresponds closest to what you feel or agree/disagree with. If you have any questions or concerns about this study, please contact Professor Jarrod Haar at jarrod.haar@aut.ac.nz.

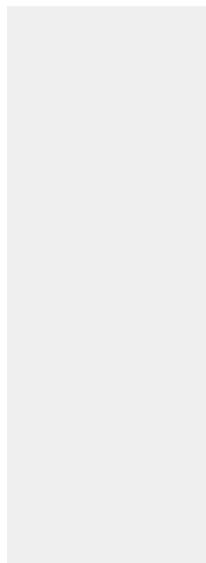
This project has ethics approval from The Research Ethics Office (Massey University, APPLICATION – MUHECN15\_031). Fatima Junaid and Professor Jarrod Haar are responsible for the ethical conduct of this research. If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Dr Brian Finch, Director, Research Ethics, Telephone: +64 (06) 356 9099 ext. 84459, email humanethics@massey.ac.nz

Should you decide to participate you have the right to:

- Decline to answer any particular question.
- Ask any questions about this research project at any time during participation.
- Provide information on the understanding that you will remain anonymous.
- Be given access to the completed research report.

Please feel free to contact the researcher directly if you have any questions or comments.

Thank you for your time and effort.



Yours sincerely

Fatima Junaid  
PhD Candidate  
Massey Business School  
Massey University  
Albany  
Email: f.junaid@massey.ac.nz

Professor Jarrod Haar  
Professor in Management  
Auckland University of Technology  
Email: jarrod.haar@aut.ac.nz

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1. Please answer the following about yourself...

	Gender	Age	Marital Status	Parental Status	Highest Education Level
What is your:	<input type="text"/>				

2. Please answer the following about your work...

Tenure in your organisation (years)	Tenure in your current job (years)	Average hours worked per week	Are you part of a union	What sector do you work within?	Type of employment status	Where are you originally from?	Where are you working?
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

3. Please answer the following:

What is your current job title:

How many employees are employed in your firm (approximately):

Have you lived abroad in the last ten years? If yes, how long? (e.g. 1 yr)

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**4. This section relates to your job. Indicate the degree to which each of the following work-related items cause stress for you, ranging from no stress (1) to a great deal of stress (5).**

	Produces No Stress	Produces a Little Stress	Produces Some Stress	Produces a Lot of Stress	Produces a Great Deal of Stress
The number of projects and or assignments I have	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The amount of time I spend at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The volume of work that must be accomplished in the allotted time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time pressures I experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The amount of responsibility I have	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The scope (breadth) of responsibility my position entails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The degree to which politics rather than performance affects organizational decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The inability to clearly understand what is expected of me on the job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The amount of red tape (Bureaucracy) I need to go through to get my job done	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The lack of job security I have	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The degree to which my career seems "stalled" (stopped)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**5. Please circle the number that best represents your opinion relating to the following items.**

	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
The organization values my contribution to its well-being.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organization fails to appreciate any extra effort from me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organization would ignore any complaint from me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organization really cares about my well-being.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Even if I did the best job possible, the organization would fail to notice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organization cares about my general satisfaction at work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organization shows very little concern for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organization takes pride in my accomplishments at work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization values workplace security	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organization provides armed security at my workplace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel safe in my workplace from the threat of terrorism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel safe at my workplace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**6. The following items relate to your work and family roles (with family including extended family, friends etc.)**

	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
My involvement in work helps me to understand different viewpoints and this helps me be a better family member	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My involvement in work helps me to gain knowledge and this helps me be a better family member	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My involvement in work helps me acquire skills and this helps me be a better family member	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My involvement in family helps me to gain knowledge and this helps me be a better worker	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My involvement in family helps me acquire skills and this helps me be a better worker	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My involvement in family helps me expand my knowledge of new things and this helps me be a better worker	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with my work-life balance, enjoying both roles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nowadays, I seem to enjoy every part of my life equally well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I manage to balance the demands of my work and personal/family life well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**7. Please respond to the following questions about how you feel "right now"...**

	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
I feel confident in representing my work area in meetings with management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident contributing to discussions about the company's strategy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident presenting information to a group of colleagues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I should find myself in a jam at work (difficult situation), I could think of many ways to get out of it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Right now I see myself as being pretty successful at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can think of many ways to reach my current work goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At this time, I am meeting the work goals that I have set for myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can be "on my own", so to speak, at work if I have to be	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I usually take stressful things at work in stride (as part of the process)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can get through difficult times at work because I've experienced difficulty before	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I always look on the bright side of things regarding my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'm optimistic about what will happen to me in the future as it pertains to work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**8. Please tick the option that best represents your opinion relating to the following items.**

	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
I have so much in life to be thankful for	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I had to list everything that I felt grateful for, it would be a very long list	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I look at the world, I don't see much to be grateful for	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am grateful to a wide variety of people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
As I get older I find myself more able to appreciate the people, events, and situations that have been part of my life history	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Long amounts of time can go by before I feel grateful to something or someone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In most ways my life is close to ideal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The conditions of my life are excellent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with my life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
So far I have gotten the important things I want in life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I could live my life over, I would change almost nothing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most days I am enthusiastic about my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel fairly satisfied with my present job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Each day at work seems like it will never end	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find real enjoyment in my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I consider my job rather unpleasant	<input type="radio"/>				
I am thinking about leaving my organization	<input type="radio"/>				
I am planning to look for a new job	<input type="radio"/>				
I intend to ask people about new job opportunities	<input type="radio"/>				
I don't plan to be in my organization much longer	<input type="radio"/>				
If I were to quit my job, I could find another job that is just as good	<input type="radio"/>				
I would have no problem finding an acceptable job if I quit	<input type="radio"/>				

**9. Below is a collection of statements about your everyday experience. Please indicate how frequently or infrequently you currently have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be.**

	Never	Some of the Time	Much of the Time	Most of the Time	All of the Time
I find it difficult to stay focused on what's happening in the present	<input type="radio"/>				
It seems I am "running on automatic" without much awareness of what I'm doing	<input type="radio"/>				
I do jobs or tasks automatically, without being aware of what I'm doing	<input type="radio"/>				
I find myself listening to someone with one ear, doing something else at the same time.	<input type="radio"/>				
I find myself doing things without paying attention	<input type="radio"/>				

**10. Please indicate how often YOU engage in the following behaviours...**

	Never	Some of the Time	Much of the Time	Most of the Time	All of the Time
Willingly give my time to help others who have work-related problems	<input type="radio"/>				
Adjust my work schedule to accommodate other employees' requests for time off	<input type="radio"/>				
Give up my time to help others who have work or non-work problems	<input type="radio"/>				
Assist others with their duties	<input type="radio"/>				
Attend functions that are not required but that help the organizational image	<input type="radio"/>				
Defend the organization when other employees criticize it	<input type="radio"/>				
Offer ideas to improve the functioning of the organization	<input type="radio"/>				
Take action to protect the organization from potential problems	<input type="radio"/>				

**11. Please select the number that best represents your opinion relating to the following items.**

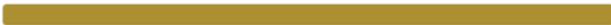
	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
I know how to change specific things that I want to change in my life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a good sense of where I am headed in my life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I want to change something in my life, I initiate the transition process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can choose the role that I want to have in a group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know what I need to do to get started toward reaching my goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I have a specific action plan to help me reach my goals	<input type="radio"/>				
I take charge of my life	<input type="radio"/>				
I know what my unique contribution to the world might be	<input type="radio"/>				
I have a plan for making my life more balanced	<input type="radio"/>				

**12. Please indicate how often YOU engage in the following behaviours...**

	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
I am always punctual in arriving at work on time after breaks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I always begin work on time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My attendance at work is above the norm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I give advance notice when unable to come to work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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 See how easy it is to [create a survey](#).



**13. Indicate the extent to which you have done the following**

	Never	Rarely	Sometimes	Often	Daily
Made fun of someone at work	<input type="radio"/>				
Said something hurtful to someone at work	<input type="radio"/>				
Cursed at someone at work	<input type="radio"/>				
Acted rudely toward someone at work	<input type="radio"/>				
Taken property from work without permission	<input type="radio"/>				
Taken an additional or longer break than is acceptable at your workplace	<input type="radio"/>				
Neglected to follow your boss's instructions	<input type="radio"/>				
Intentionally worked slower than you could have worked	<input type="radio"/>				
Discussed confidential company information with an unauthorized person	<input type="radio"/>				
Put little effort into your work	<input type="radio"/>				

**14. Read the following statements and please select the choice indicating the extent to which you experience the following statements:**

	Never	A few times a year	A few times a month	A few times a week	Always
I feel emotionally drained from my work	<input type="radio"/>				
I feel used up at the end of the workday	<input type="radio"/>				
I feel tired when I get up in the morning and have to face another day on the job	<input type="radio"/>				
Working all day is really a strain for me	<input type="radio"/>				
I feel burned out from my work	<input type="radio"/>				
I have become less interested in my work since I started this job	<input type="radio"/>				
I have become less enthusiastic about my work	<input type="radio"/>				
I have become more cynical about whether my work contributes anything	<input type="radio"/>				
I doubt the significance of my work	<input type="radio"/>				
I just want to do my job and not be bothered	<input type="radio"/>				

**15. Thinking of the past few weeks, how much of the time has your own job made you feel each of the following?**

	Never	Some of the Time	Much of the Time	Most of the Time	All the Time
Comfortable?	<input type="radio"/>				
Relaxed?	<input type="radio"/>				
Calm?	<input type="radio"/>				
Anxious?	<input type="radio"/>				
Worried?	<input type="radio"/>				

Tense?	<input type="radio"/>				
Enthusiastic?	<input type="radio"/>				
Optimistic?	<input type="radio"/>				
Cheerful?	<input type="radio"/>				
Depressed?	<input type="radio"/>				
Gloomy?	<input type="radio"/>				
Miserable?	<input type="radio"/>				

**16. Please respond to the following questions with regards to exposure to terrorism.**

**NOTE: If you find any of the questions (Q16-Q20) distressing you can always stop the survey. Please call this number for free help: 0336-0542934**

	Yes	No
Have you personally witnessed an attack or attacked sight?	<input type="radio"/>	<input type="radio"/>
Have you ever escaped from the vicinity of an attacked sight?	<input type="radio"/>	<input type="radio"/>
Have you ever had to evacuate workplace due to threat of terrorism?	<input type="radio"/>	<input type="radio"/>
Have you ever had to evacuate home/any other place due to threat of terrorism ?	<input type="radio"/>	<input type="radio"/>
Have you had difficulty reaching home due to an attacked sight being in the way?	<input type="radio"/>	<input type="radio"/>
Has your work or home site ever been near an attacked location?	<input type="radio"/>	<input type="radio"/>

**17. As you think about the terrorist attacks, how often have you felt ...**

	Don't Know/Not Applicable	Never	Not Very Often	Sometimes	Very Often
Anxious?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scared?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worried?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Frightened?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**18. As you think about the terrorist attacks...**

	Not at all	A little bit	Moderately	Quite a bit	Extremely
Nowadays, I worry about my personal safety	<input type="radio"/>				
Nowadays, I feel a heightened sense of tension when I am in crowded places	<input type="radio"/>				
I am afraid of a terror strike harming me	<input type="radio"/>				
I am afraid of a terror strike harming my family	<input type="radio"/>				

**19. Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, indicate how much you have been bothered by terrorism in the past month.**

	Not at all	A little bit	Moderately	Quite a bit	Extremely
Repeated, disturbing memories, thoughts, or images of a stressful experience from the past?	<input type="radio"/>				
Repeated, disturbing dreams of a stressful experience from the past?	<input type="radio"/>				
Suddenly acting or feeling as if a stressful experience were happening again (as if you were reliving it)?	<input type="radio"/>				
Feeling very upset when something reminded you of a stressful experience from the past?	<input type="radio"/>				
Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded you of a stressful experience from the past?	<input type="radio"/>				
Avoiding thinking about or talking about a stressful experience from the past or avoiding having feelings related to it?	<input type="radio"/>				
Avoiding activities or situations because they reminded you of a stressful experience from the past?	<input type="radio"/>				
Trouble remembering important parts of a stressful experience from the past?	<input type="radio"/>				

**20. Continuing on from the above (Q. 19). Please read each one carefully, indicate how much you have been bothered by terrorism in the past month.**

	Not at all	A little bit	Moderately	Quite a bit	Extremely
Loss of interest in activities that you used to enjoy?	<input type="radio"/>				
Feeling distant or cut off from other people?	<input type="radio"/>				

Feeling emotionally numb or being unable to have loving feelings for those close to you?	<input type="radio"/>				
Feeling as if your future somehow will be cut short?	<input type="radio"/>				
Trouble falling or staying asleep?	<input type="radio"/>				
Feeling irritable or having angry outbursts?	<input type="radio"/>				
Having difficulty concentrating?	<input type="radio"/>				
Being "superalert" or watchful or on guard?	<input type="radio"/>				
Feeling jumpy or easily startled?	<input type="radio"/>				

**21. Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, indicate how much you have been bothered by that problem in the past month.**

	Don't Know/Not Applicable	Not at All	A Little	Some	A Great Deal
How concerned are you that there will be another terrorist attack in the near future?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How concerned are you personally about you yourself, a friend, or a relative being the victim of a future terrorist attack?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much, if any, have the terrorist attacks shaken your own sense of personal safety and security?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**22. I am looking to conduct a follow-up survey of this again in 3-months' time (approx) to see how people's experiences change. If you are willing for me to contact you again in 3-months' time, please provide your email address here:**

Please feel free to contact the researcher directly if you have any questions or comments.

Thank you for your time and effort.

Yours sincerely

Fatima Junaid  
PhD Candidate  
Massey Business School  
Massey University  
Albany  
Email: f.junaid@massey.ac.nz

Professor Jarrod Haar  
Professor in Management  
Auckland University of Technology  
Email: jarrod.haar@aut.ac.nz

## Appendix G: Human Ethics Approval Application



### MASSEY UNIVERSITY ALBANY

19 August 2015

Fatima Junaid  
23a Pluto Place  
Beach haven Birkenhead  
**Auckland**

Dear Fatima

#### **HUMAN ETHICS APPROVAL APPLICATION – MUHECN15\_031**

#### **Exploring the relationship of Job Stress and extreme extra organisational stressor: The role of PsyCap & POS on employee outcomes**

Thank you for your application. It has been fully considered, and approved by the Massey University Human Ethics Committee: Northern.

Approval is for three years. If this project has not been completed within three years from the date of this letter, a re- approval must be requested.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely

A handwritten signature in black ink, appearing to read 'A. Chrystall'.

Dr Andrew Chrystall

#### **Acting Chair**

#### **Human Ethics Committee: Northern**

cc Professor Jarrod Haar  
School of Management

**Albany Campus**

Dr Darryl Forsyth  
School of  
Management

**Albany Campus**

Professor Sarah Leberman  
Head of School of  
Management

**Albany Campus**

Te Kunenga  
ki Pūrehuroa

#### **Research Ethics Office**

Private Bag 102 904, Auckland, 0745, New Zealand Telephone +64 9 414 0800 ex 43276  
humanethicsnorth@massey.ac.nz

## Appendix H: Counsellor Services



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### Counselor Services

1 message

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**Mahekamil Khan** <kmahekamil@yahoo.com> Thu, 30 Jul 2015 at 6:47 am To: fatimaajunaid@gmail.com <fatimaajunaid@gmail.com>

SALAM,

I feel immense pleasure and delight reading this e-mail and i really hope you are in the best of health and spirits too.

I feel privileged and find this a great opportunity and ready to give my services anytime you need. I would like to offer my services as a volunteer psychologist and dont want to charge any fee regarding the provision of services. Being a psychologist I am service oriented and would like to support you as much as i can.. If you have any related query feel free to ask.  
Cell No: 0336-0542934

Regards,

Qudsia

Sent from Yahoo Mail onAndroid