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**Four Essays on the Influence of Terrorism Stress and Job Stress
on Employee Attitude and Behavior**

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Dedication

I dedicate this work in reducing global terrorism in all ways. I hope that it will help and uplift the lives that are touched by this dangerous universal situation”.

May we all find peace.

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List of Acronyms

BO	Burnout
CFA	Confirmatory factor analysis
COR	Conservation of Resources Theory
EFA	Exploratory Factor Analysis
ERI	Effort-Reward Imbalance
FOT	Fear of terror
GTI	Global Terrorism Index
IEP	Institute of Economics and Peace
KPK	Khyber Pakhtunkhwa
OC	Organizational commitment
POS	Perceived organizational support
SATP	South Asian Terrorism Partial
STT	Sensitivity to terrorism
UN	United National
US	United Stated

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ABSTRACT

Terrorism is a scourge which has now spread across the globe. The events of the last few years in Christ Church (New Zealand), London (UK), Paris (France), Peshawar (Pakistan) and other cities around the world highlight the fact that terrorism hurt physically and mentally who experience it. Meanwhile, in some areas, discontinuous terrorism is an everyday reality. Living under terrorism can be extremely stressful for societies in general and business in particular. Until now, there has been scant research focusing on this phenomenon. Hence, this study aims to understand terrorism stress and its causes on various job outcomes for employees working in terrorism-ridden areas. Two cities of Pakistan were study setting for this research, as she has suffered from discontinuous terrorism for about two decades, with nearly 60,000 deaths between 2003-2017. This thesis work has four essays, based on three stress frameworks. The three distinct frameworks are; Stress Framework (Lazarus and Folkman, 1984), Effort-Reward Imbalance Framework (Siegrist, 1998) and Conservation of Resources framework (Hobfoll, 1988).

Chapter one is about literature review, and we explored terrorism and job stressors, and their influence on employee job outcomes, and determined the various roles of personal and organisational resources. Afterwards, one qualitative study (Chapter 2) and three separate quantitative studies (Chapter 3, 4 and 5 respectively) were conducted to test some of these relationships. The qualitative research (Chapter 2) was based on the existing literature and involved semi-structured interviews with 22 employees. It aimed to gain in-depth knowledge about job and terrorism stressors from various employees view of reality. Thematic analyses were used, it highlighted several themes which were highly embedded in the context of on-going

terrorism. The main themes concerned are job stress, terrorism stress, organizational support in the context of terrorism, and various employee outcomes related to the job and terrorism. The qualitative study pointed out that the employees at large are exposed to terrorist incidents suffered physically and mentally.

The altogether three quantitative studies (chapter 3, 4 and 5) respectively informed by the qualitative study (chapter 2) and focused on terrorism stress and job stress. A separate theoretical framework applied for each quantitative research in the thesis work. The three studies conjointly found that terrorism stressor and job stressor adversely affect employee health and wellbeing and it has an onward effect on their commitment and burnout. Rumination, organisational justice, and resilience mediated the relationships in each study while organisational support helped in moderating the adverse effects of the stressors.

Furthermore, it contributes in general to the literature on human resource management and organisational studies on the areas of stress and employee behaviour. More specifically, to the development of stress theory, effort-reward framework, and conservation of resources theory. Also, the study conducted in areas that were hit by discontinuous terrorism incidents. It presented voices which are otherwise not heard and has implications for the well-being of the individual employees working in, and for organisations operating in the risky areas. However, beyond Pakistan, the study also has wider implications for international organisations conducting in similar contexts.

Keywords: Terrorism stress, Job stress, Organizational commitment (OC), Rumination, Perceived organization support (POS), Effort, Reward, Organizational justice (OJ), Sensitivity to

terrorism (STT), Burnout (BO), Psychological resilience (RS), Psychological well-being (WB),
Structural Equation Modeling (SEM)

RESUME EN FRANÇAIS

Le terrorisme est un fléau qui s'est répandu dans le monde entier. Les événements de ces dernières années au Sri Lanka, en Nouvelle-Zélande, au Royaume-Uni, en France, au Pakistan et dans d'autres zones du monde ont fait des victimes, touchées physiquement et mentalement. Dans certains pays, le terrorisme est une réalité quotidienne. Vivre sous le terrorisme peut être extrêmement stressant pour les sociétés en général et les entreprises en particulier. Jusqu'à présent, peu de recherches ont été consacrées à ce phénomène. Par conséquent, cette étude vise à comprendre le stress lié au terrorisme et ses effets sur les employés travaillant dans des zones qui y sont exposés. Deux villes du Pakistan ont été le lieu d'étude de cette recherche, car elles souffrent d'incidents terroristes depuis environ deux décennies, faisant près de 60 000 morts entre 2003 et 2017.

Ce travail de thèse constitué de quatre essais, se fonde sur trois cadres conceptuels théoriques, développés à partir d'une revue de littérature complète et une étude de recherche qualitative. Les trois cadres distincts utilisés sont : le modèle du Stress et de l'Evaluation Cognitive (Lazarus et Folkman, 1984), le modèle Déséquilibre Effort/Récompense (Siegrist, 1998) et la théorie de Conservation des Ressources (Hobfoll, 1988). Dans le cas des études quantitatives, un cadre théorique distinct a été développé pour chaque étude de la thèse.

Le premier chapitre porte sur la revue de la littérature. Nous avons également exploré le terrorisme et les facteurs de stress au travail, ainsi que leur influence sur les employés, et avons déterminé les différents rôles des ressources personnelles et organisationnelles. Par la suite, une étude qualitative (chapitre 2) et trois études quantitatives distinctes (chapitres 3, 4 et 5) ont été menées pour tester certaines de ces relations. La recherche qualitative (chapitre 2) s'appuie sur

de modestes éléments de la littérature existante pour enrichir la connaissance à travers 22 entretiens semi-structurés de salariés. Elle vise à acquérir une connaissance plus approfondie du stress lié au travail et au terrorisme. Des analyses thématiques ont été utilisées pour mettre en évidence plusieurs thèmes. Les principaux d'entre eux sont le stress au travail, le stress dû à la menace terroriste, le soutien organisationnel dans le contexte du terrorisme et les diverses conséquences sur le travail du risque terroriste. L'étude qualitative a montré l'incidence physique et mentale de l'exposition attaques terroristes.

Les trois études quantitatives au total (chapitres 3, 4 et 5) découlent des résultats de l'étude qualitative (chapitre 2) et de la littérature. Elles montrent de manière chiffrée les facteurs de stress liés au terrorisme et au stress au travail affectant négativement la santé et le bien-être des employés, ce qui se répercute sur leur engagement organisationnel et leur épuisement professionnel. Le processus mental de rumination, la justice organisationnelle et la résilience influencent les indicateurs de stress et les conséquences de ce dernier sur les employés. Dans ce contexte de menace, le soutien organisationnel modère les effets indésirables des facteurs de stress.

Ce travail contribue de manière générale à la littérature sur la gestion des ressources humaines et aux études organisationnelles sur le stress et le comportement des employés. Plus spécifiquement, il apporte de nouveaux éléments aux théories du stress, au cadre effort-récompense et à la théorie de la conservation des ressources. Comme ce travail a été mené dans des zones touchées par des incidents terroristes ponctuels il permet l'expression de voix qui ne sont autrement pas entendues et qui expliquent les implications pour le bien-être de chaque employé, ainsi que pour les organisations opérant dans les zones à risque. Cependant, au-delà du

Pakistan, cette étude a également des implications plus larges pour les organisations internationales opérant dans des contextes similaires.

Mots-clés: Terrorisme, Stress au travail, Engagement organisationnel (OC), Rumination, Soutien organisationnel perçu (POS), Effort, Récompense, Justice organisationnelle (OJ), Sensibilité au terrorisme (STT), Burnout (BO), Résilience psychologique (RS), Bien-être psychologique (BM), Modélisation par équations structurelles (SEM)

General Introduction

G-1 Research Background

I want to explain why I chose this topic for my doctoral studies research work. For seven years of my life, I lived under the threat of terrorism in my country, Pakistan. There, people are vulnerable and face many hurdles regularly in their daily routines. A massive number of people have unfortunately lost their lives and many more left their homes and moves to other safe places because of fear, threats, kidnapping, etc. The terrorist incidents or events influenced me to research on this demanding, yet full of challenges, topic. While the idea of working on this is unfortunately not fascinating as per the desire of any researcher because of complexities associated with it, I acknowledge the fact that tenderness towards humans and contribution to academia attracted me most for this topic. Accordingly, the more I researched into the subject, the more I felt compelled to study it.

I feel lucky to have received a Doctoral scholarship from the Higher Education Commission of Pakistan for France. Very few fortunate scholars qualified the set criteria and received this scholarship after a hectic process at the national level back in my country. The award of the scholarship was a momentous success, and it gave me a chance to work on employee stress and organisational outcomes mainly living and working in risky areas.

For instance, terrorist attacks of Charlie Hebdo, Paris that happened in January 2015 pushed millions of French people in the street to defend press freedom. I arrived in France in September 2015 for my PhD studies. Therefore, I had a detailed discussion with my research director on my PhD dissertation research area. My supervisor motivated me to work on the

problem of exposure to terrorism and employee consequences at work. Further, he allowed me to research what I felt deeply about discontinuous terrorism incidents back in my country. Although, in the beginning I knew I needed help as literature on the topic was scarce. But best of all, my supervisor was always there to encourage and support me in these times.

Only two months later, in November 2015, a massive terrorist incident occurred in Paris in which 130 innocent people were killed. This significant incident raised the salience of terrorism issue throughout ~~the~~ France. In July 2016, the attack in Nice provoked a hot issue in the popular press throughout the country. Henceforth, the country remained high alert after these deadly incidents. The fact that in France these attacks targetted entertainment places must not hidde that public administrations (schools, universities, hospitals...) and workplaces in general can be victims of terrorism. Well informed, Aix-Marseille University organized two meetings on safty an security in April 2018 with the Préfet de police des Bouches du Rhône, the Direction départementale de la sécurité publique des Bouches du Rhône, the unité Recherche, Assistance, Intervention, Dissuasion (RAID) de la Police nationale, and the Direction générale de la sécurité intérieure (DGSI) (please see Appendix 1).

When you begin your PhD on this topic and see discontinuous events in these three years during your studies i.e. attacks in New Zealand's Christ Church (March 15, 2019), and Sri Lanka's Churches and hotels (March 21, 2019), you are usually thinking that how people go through working in these affected areas. Consequently, individuals are often stressed due to such attacks and it is mostly unknown how terrorism stress affect them. Under these circumstances, this study addresses *how* employees are affected by the terrorism stressor? And *how* their daily

work and life practices are changed? While remaining under the burden of the stress living in terrorism-ridden areas.

G-2 Work Stress and Terrorism

The employees in organisations are worried because of stress at work (De Jonge & Dormann, 2017; Green, 2006; Peterson, 2018; Tennant, 2001). Job stress exists all around including the developed societies, and it is significantly supported through qualitative and quantitative studies in various contexts (Dragano et al., 2017; Smith et al., 2018; Wolff et al., 2018). A novel approach from a perspective of job stress which has not been investigated is the employees who are working in dangerous areas. Research has demonstrated that job stress diminishes if workers are provided rewards according to the efforts they put forth at work (Dragano et al., 2017; Montano et al., 2016).

Besides, an individual also needs capabilities or resources to manage stress adequately in a work setting (Luthans & Frey, 2017; Luthans et al., 2018). In any case, the degree to which these resources help, and support mitigate work stressors with regards to living in terrorism-ridden areas needs in-depth examination. For this reason, this research endeavour considers exploring this research area with the aim to further understand its various effects. As a result of discontinuous terrorist attacks, we first present the casualties and set of vulnerabilities people face in terrorism-ridden areas.

Research shows that after the 9/11 twin towers attacks in New York, approximately half a million people died in Iraq, Afghanistan, and Pakistan because of a US-led war on terrorism (Crawford, 2017). Researchers believe that the war affected civilians directly because there was

a considerable cost associated in the form of massive casualties of humans, the migration, and destruction of their homes. A lot of challenges are associated with the people who are living in those areas at various levels. Consequently, people encounter health and wellbeing issues working in affected areas.

Indeed, terrorist events focusing innocents is a standout amongst the most severe difficulties of the time (Bader et al., 2015). It does not just bring about the loss of lives, but also disproportional responses, for example, feelings of individuals and psychological dread (Canetti-Nisim et al., 2009), disarray and powerlessness against a regularly unremarkable foe (Kalmoe et al., 2018). After all, employees working in terrorism-ridden areas are ignored in previous research (Johns, 2017). So, this thesis work proposition contends that the context of 'living under ongoing terrorism' is one that merits more prominent consideration.

Terrorism incidents result in high stress for the general masses (Huber, 2018). The incidents are regularly outside the scope of an ordinary individual's and can overpower a person's typical adapting capacity (Dubos, 2017). In this way, these incidents cause an extreme response. Canetti-Nisim et al. (2009) express that it is nothing unexpected that " individuals who encounter terrorism attack, can see damage in the case of demise of a friend or family member. In other case they may face psychological sufferings and wellbeing problems. Persistent as well as regular exposures to fear-based incidents can prompt higher psychological odds to the people (Hickey, 2018; Mirabito, 2017). In the following section, we present the reality of the context of terrorism in connection to Pakistan.

G-3 Pakistan and the Context of Terrorism

Western people often lack information about the terrorist phenomenon outside their borders. Pakistan is a nation having already been used against terrorism oppression while she experiences it herself also after 9/11. For ten years on average, the number of human deaths caused by targeted terrorist incidents, suicide bombarding and open firing assaults have been assessed between 1000-4000 (South Asia Terrorism Portal) reporting a loss of life of 2,500 (Portal, 2017) consistently. According to the Global Terrorism Index (Crawford, 2017; Economics & Peace, 2014), Pakistan is one of the five countries worst hit by terrorism, mainly making its north-western parts one of the most unstable places on earth. It is described in a report some facts concerning to losses about Pakistan; "The report said that war-related terrorism incidents had killed 60,000 people in Pakistan, including 9,000 security and armed personnel and 35,000 civilians. The rest of the casualties were anti-government fighters (Crawford, 2017).

A United Nations (2012) report described that Pakistan has endured: "overwhelming cost of the battle against radicalism and terrorism. The death toll alone is evaluated at 35,000 civilians and 9,000 security-related personnel. Also, direct and indirect costs ascended from \$2.669 billion in 2001/02 to \$13.6 billion in 2009/10 with projections for 2010/11 being as high as \$17.8 billion" (p. 2). The increasing yearly death toll is a result of terroristic incidents in Pakistan growing from 164 in 2003 to 3,318 in 2009 and totalled more than 20,000 at the end of 2015. In 2015, Pakistan was one of the five countries on the list (Economics & Peace, 2014; Portal, 2017).

Hence, all segments of the society have generally influenced by terrorist events and threats in Pakistan, particularly in the area of Baluchistan and Khyber Pakhtunkhwa (KPK) (Portal, 2016). These are the worst hit territories in the country. The following anecdote highlights the

reality of the lives of those under constant fear of terrorism. “On December 16, 2014, a single terrorist incident in a school in Peshawar occurred where 132 school kids lost their lives alongside their central and other school staff prompting an aggregate loss of 149 lives, and many more of this type happened from time to time. As a consequence, Pakistan, unfortunately, provides a setting to study terrorism and changing employees work behaviours in terrorism-ridden areas.

As previously expressed, a large portion of Baluchistan and Khyber Pakhtunkhwa population live under the threat of terrorism. It is likely that individuals exposed to terrorism may experience psychological oppression, the loss of a family member, friends and property. Living in the terrorism area makes individuals feel vulnerable and fearful. Such an inclination coupled with the steady loss of lives can result in stress disorders (Bader et al., 2015). As such, we will quickly recapitulate research questions which are upraised in this study.

G-4 Research Problem and the Aim of the Study

Research scholars have not concentrated on settings like Pakistan, a nation having a significant population of over 210 million individuals. This population is correspondingly half of the United States. I contrast Pakistan with the US because it differs on the grounds that strikingly differ on research and more significant part of the terrorism and psychological vulnerabilities research has taken place there. There are literature gaps in the academics where Pakistan as a country possesses characteristics and provides the best possible setting to explore how living in stressful conditions impacts employee health, wellbeing and work behaviors. In any case, understanding the stressors in the context was a part of the investigation, and we also need

sources that may help in reducing the negative results of stressors. The following section gives a brief point of view of the research questions used in this study.

This research aims to build an understanding of the following research questions. This research study mainly addresses these areas during the investigation: the terrorism stress, job stress, terrorist context, employee behavior (physical and psychological) and the employer response. Following research questions designed after a review of literature for this study;

- What constitutes terrorism stress for employees?
- What effect terrorism incidents have on employees working in terrorism-ridden areas?
- What effect work stressor has on employee outcomes working in terrorism-ridden areas?
- How terrorism stress and job stress affect each other? Is the combination of terrorism and job stress leads to more harmful effect for employees working in terrorism-ridden areas?
- What effect does terrorism incidents have on employee psychological state working in terrorism-ridden areas?
- How can employee psychological state and behaviour can be changed working in terrorism-ridden areas?
- Are perceptions of social support beneficial for employees? Does social support buffer the influence of stressors on outcomes working in terrorism-ridden areas?

G-5 Why Do We Need to Do Research on Terrorism and Stress?

Research on terrorism as a stressor is exceptional and not studied in organizational studies (Bader et al., 2015; Byron & Peterson, 2002; Howie, 2007). With growing incidents of terrorism, it is likely that it may affect employees and their work-related outcomes, but the nature of those

effects are mostly unknown (Bader & Berg, 2014; Shirom, Toker, Melamed, Berliner, & Shapira, 2013). There have been growing numbers of call for research focusing on terrorism and its various consequences. For instance, the recent conference at the UN held in June 2018 was based on “Strengthening International Cooperation to Combat the Evolving Threat of Terrorism.” Rand Corporation also quoted conference on “Terrorism and low-level conflict Conference” (Jenkins, 1982). At another place a special issue of the International Journal of Human Resource Management called scholars to research on the dangers and risks associated to the HRM titled: How to Manage People in Hostile Environments (Bader et al., 2015), and at another place the British Academy of Management’s (2016) annual conference theme was on thriving in turbulent times. An Academy of Management Journal called a special issue on contextual differences between the East and the West and how these differences demonstrate their role in present management practices (Barkema et al., 2015). Hence, in the wake of the current ongoing situation and incidents happening around the world, it is thus pivotal to focus research in this area.

Though countries fail to notice the factor of terrorism that seriously exists around the world at various levels, for instance, the Sri Lanka and Christ Church terrorist incidents, left many points for the world think tanks to devise robust strategies to stop such events. The growing issue of terrorism all over the world indicates that it is likely to have broader implications for individuals, organizations, and societies (Economics & Peace, 2014), As an illustration, employees working in risky areas are under extreme stress and therefore may be dissatisfied with their jobs and exhibit low productivity. Overwhelmed by stress, an employee may show aggression and deviant behaviors, these, in turn, become costly for the organization as a whole. Looking beyond organizational implications, a large number of people have fled or are

fleeing from such terrorism-ridden areas. Those immigrants bear the burden of the stress, which comes with them to the host organizations and countries. It is timely and vigilant therefore to focus on and address these issues in management and organizational studies.

G-6 Organization of the Thesis

Chapter one focuses on the literature review, precisely discussing three various stress frameworks used in this study. Chapter two is based on qualitative research (EURAM, 2019). In this study, we investigated the contextual meanings of stressors according to the aim of the study. Chapter three (AOM, 2018), four (EGOS, 2019) and five (EURAM, 2019) are stand-alone and quantitative papers, discussing phenomenon related to the objective of the entire study. As a consequence of the 4 essays organization, the references are presented after each chapter to facilitate the reading of each essay.

Furthermore, developing the thesis by separate studies (publications) 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. The researcher found this challenging because it teaches both the art and science of research.

Chapter 1: Literature Review

Introduction

This section sheds light on the literature-based background of the research. It covers the literature used to structure hypothetical establishments and research inquiries. It presents stress theory for the study of terrorism in 1.1; it highlights the Effort-Reward Imbalance (ERI) frameworks in 1.1.1, Conservation of Resources (COR) in 1.1.2, and terrorism stress in 1.1.3 respectively. Section 1.2 covers various outcomes of job and terrorism stress. Section 1.3 introduces other variables (moderators and mediators) such as perceived organizational support (POS) (moderator), sensitivity to terrorism (STT) (moderator), rumination (mediator), organizational justice (mediator) and resilience (mediator). Finally, we provide key research gaps with chapter summary in the chapter.

1.1. Theory of Stress for the Study of Terrorism

This research study focuses on the context of terrorism; so it is fundamental to characterize terrorism and how it affects employees' behaviors. Generally, to establish how being a factor that is exogenous to the organization influencing the workplace as well as to the employee psychological stimulus needs elaboration. According to the Oxford Dictionary (Dictionary, 2016), terrorism is defined as “the use of violent actions to achieve political aims or to force a government to act.” Similarly, 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.” It describes using violence as a tool to frighten various masses which causes “extreme fear” to

them. In the above definitions, terrorism incidents reflect violence, its purposes ranging from generating fear among civilians to mass casualties (Sloan, 2006) and the destruction of organization infrastructure (Laqueur, 2000).

Indeed, it is a cause of crippling economies, organizations, and employees all over the world (Howie, 2007). Putting these meanings into the context of this study, if people who are living under constant fear of on-going terrorism will suffer, and its direct and indirect threats will make people pray to the psychological toll due to the unlawful use of the violence and intimidation against them. It can take physical and mental damage to people, which can understand through the theory of stress (Lazarus & Folkman, 1987).

Stress theory is applied in the study to explain the theoretical basis of this research. It is a useful method to concentrate and develop the theoretical foundation for employee stress working in dangerous areas. Bader and Berg (2014) applied stress theory in the context of terrorism stress and other various stressors in the context of Afghanistan. Hence, it enabled researcher to concentrate on the stress theoretical framework and to explain the findings of this study with terrorism stress in a better way. The theoretical approach is incorporated in such a way that helps to explain the relationship of job stress and the importance of terrorism on employees, and it enables an understanding of how the stressors operate and influence employee behaviors.

Stress is frequently used in research and described as ‘adverse health effects which emerge from specific work requirements which do not correspond to the requirements, skills or capabilities of the worker’ (Dollard et al., 2003). In their generally perceived work on psychological stress, it is defined as “stress is conceived as a relationship between a person and the environment evaluated as the situation that exceeds and endangers one’s wellbeing.” It is the

combination of many factors; individual appraises with different outcomes. In this way, stress isn't only an outside incitement or a particular example of responses, rather it 'alludes to an association with the condition that the individual assesses stress as significant for his or her wellbeing (Lazarus and Folkman 1987). Therefore, stress identified with being distressing is based upon the person's psychological evaluation of the person-environment situation (Lazarus, 1995). Fundamentally, if a stimulus triggers a specific reaction, be it positive or negative, it is viewed as a stressor; if a man sees this stressor as negative, it prompts strain. So as to manage its effects, people should have the capacity to cope (Lazarus, 1995). If an individual can't viably cope with a stressor, negative results can be expected (Lazarus, 1993).

Another level of stress emerges relying upon the significance of the stressor (Lazarus et al., 1985). Consequently, the presence of a stressor itself is not adequate to cause stress, but it relies upon a man's observation and how he or she appraises the situation. This implies a similar stressor; for example, a terrorist incident at any place or with any organization can cause worry or stress for a diverse segment of society, contingent upon the person's evaluation. This reaction is individualistic and dependent on one's knowledge, age, identity qualities, sex or other statistic attributes (Lazarus & Folkman, 1987). In this way, we see stress from a mechanism like changes become stressful only when it strains the capacities of the entire organism/environment system to adapt to the change.

Additionally, living under constant fear of terrorist threats can take a toll on people (Toker et al., 2015) causing them to feel stressed under such circumstances (Hobfoll et al., 2007). Coupled with the constant exposure of terrorism threats, it is likely that due to its continuous fear, it continuously increases the stress of trauma which leads to an actual loss of life and

property (Hobfoll et al., 2007). Again, this stress is not only felt in personal life or surroundings where it happened but is carried forward to the workplace as people living under such circumstances still must work and make ends meet (discussed in the Academy of Management (AOM, 2018) paper, Chapter 3).

The following section presents the Effort-Reward Imbalance (ERI) framework; it provides the literature review of the job stress framework.

1.1.1. Effort-Reward Imbalance (ERI) Framework

The main feature included in the model corresponds to the key psychological risk factors and stress-related illness because of an imbalance in efforts and rewards. It emphasizes the notion of reciprocity at work (Siegrist, 1998, 2002). Siegrist (2002) uses the ERI framework to refer to the disparity between effort-reward imbalance and the resulting stress in the working environments. In their research, the word ‘effort’ is used in its broadest sense to refer to all efforts an employee made while the term ‘reward’ is used to describe all rewards received in exchange of their efforts at work. The core of the transaction is based upon proper return expectancy reflected in efforts being compensated with proper rewards. To put it another way, the ERI framework indeed affirms that work described by both high efforts and low rewards, in general, correspond to a shortfall between “cost” and “gains.” In this case, an imbalance between high efforts spent and low rewards received is likely to produce negative emotions which promote stress (Jonge et al., 2008; Van Vegchel et al., 2005).

On the contrary, a balance between effort spent and rewards received is likely to produce positive emotions which promote well-being and health (Montano et al., 2016). The

disequilibrium may cause a condition of emotional distress, which can prompt strain responses. As a result, the primary assumption of the ERI framework is that where an unequal relationship exists between the employee's perceptions of effort and reward in the work environment, consequently work strain will result (Lange et al., 2005; Siegrist et al., 2004). Siegrist (2002) emphasizes a balanced ratio between effort and rewards in the prediction of employee well-being.

For instance, it is investigated in previous research on work stress is associated with burnout, disability, and negative emotions because of violations in the principle of reciprocity, e.g., (Lange et al., 2005; Montano et al., 2016). In the same way, the ERI framework provides an approach in investigating the risk element of the working environment. Consequently, terrorism is a stressor which has a considerable impact on organizations' and employees' health (Elfering et al., 2005). Therefore, many of the basic functions of the organization fluctuate because of changes in the external environment (Fee et al., 2017). Research shows that increased direct and indirect incidents at workplaces have created hazardous work-life situations, affecting the organization's performance as well as employees' attitude and performance (Bader & Berg, 2014; Canetti-Nisim et al., 2009; Malik et al., 2014).

In previous research, numerous potential aspects of work stress due to the imbalance between effort and reward have been investigated for overview burnout (Hämmig et al., 2012), absenteeism (Allisey et al., 2016; Montano et al., 2016). Stress may be caused by organizational stressors, or environmental (extra-organizational) stressors, such as factors outside the workplace that cause stress (Hobfoll et al., 2007; Lazarus & Folkman, 1987). The systematic investigation into the study on employee stress and outcomes has mainly concentrated only on organizational

factors that lead to physical and psychological related illness while extra-organizational factors that influence perceived stress have largely ignored. Extra-organizational factors of stress could be many; one such crucial element is environmental threats or terrorism.

The literature on stress, in management or other disciplines, suggests that the severe or acute extra-organizational stressors like terrorist incidents can result in costly negative repercussions for the organization (Byron & Peterson, 2002) (discussed in the European Group of Organizational Studies (EGOS) Paper, Chapter 4).

1.1.2. Conservation Of Resources (COR) Theory

COR theoretical framework states that individuals put efforts to obtain, maintain and protect their resources. They apply their resources to overcome stress and keep fit into society (Hobfoll, 1988). COR approach predicts health, wellbeing, and a definite sense of self in stressful challenges (Freedy & Hobfoll, 2017).

COR approach is based on some premises which received enough attention; (please check Freedy & Hobfoll, 2017; Gorgievski & Hobfoll, 2008; Holmgreen et al., 2017), it portrays useful application in the context of stress. Different from other stress frameworks, COR theory gives particular importance to 'stress,' and clearly defines both loss and gain cycles. It emphasizes that the comprehension of both cycles is essential for people who face stress and stand against stress in future times (Hobfoll, 2011). According to framework approach, stress takes place in three steps; first, when there is a threat of a loss of resources, second, an actual net loss of resources, and third, a lack of gained resources next to the spending of resources. Therefore, resources are

defined as things that one values, specifically objects, states, and conditions (Halbesleben et al., 2014). (discussed in the European Academy of Management (EURAM) Paper, Chapter 5).

1.1.3. Terrorism Stress

Terrorism is an international issue that crippled peace of mind of societies at large and businesses in particular (Howie, 2007). As a matter of fact, the attacks on the Twin Towers in New York, Concert Hall in Paris or London Bridge in London and recent attack at Christ Church in New Zealand have gotten the attention of Westerners, very few people know that it has spread all over the world (Economics & Peace, 2014). It is evident in the last decade and, more recently, in widespread incidents of terrorism in the previous three years (Index, 2018). To name but a few, countries affected by terrorism include France (Hirsch & Keller, 2015), England (Chen, 2018; Hunt, 2018), America (Argenti, 2002; Ryan et al., 2003), and more devastatingly Syria, Afghanistan and Pakistan (Crawford, 2013; Economics & Peace, 2014; Index, 2015).

So, if we understand the above contexts, stress can cause people, especially where the problem is at an extreme level. To put it differently, the people working in areas that experienced more terrorist attacks face psychological changes that pushed them away from concentration on the workplace. Lack of focus is the prime reason of a reduced level of job commitment, lower performance and changes in overall behavior (Bader & Berg, 2013; Howie, 2007; Ryan et al., 2003; Shirom et al., 2013). Terrorist incidents are totally unexpected, unpleasant experience a person faces. These incidents are outside the range of a person's capabilities, powerful enough to overwhelm standard coping ability of anyone. Such a powerful effect can cause a severe stress reaction (Bell, 1995). Such stressful or traumatic events can become acute-extra-organizational stressors (Beehr, 2014).

1.2. Outcomes of Job and Terrorism Stress

Job stress has spread throughout the world causing the workplace to a great extent. According to the European Agency for Safety and Health at Work and working conditions survey results, job stress is at the second number in a sequence that pose or likely to cause a threat to the work-related problem to the working environment. In this survey results, people experienced on average 28% stress at work (EU-OSHA, 2015). In another poll conducted by the European Survey of Enterprises on New and Emerging Risks (ESENER), found that 40% of managers think psychological risks are tough to manage. They consider that they have more significant stress while working compared to employees a generation ago (EU-OSHA, 2015). Besides, every sixth employee encounters or undergoes work stress every year (Naghieh et al., 2015). Hence, demanding circumstances creates stress that contributes to the organizational problems in various forms such as employee displeasure, low performance, lower organizational commitment behaviors (Akers, 2017; Beehr, 2014; Boscarino et al., 2006; Elfering et al., 2005). Research shows that stress is the primary cause of turnover in organizations (EU-OSHA, 2009). Due to ongoing stress at work, workers will develop psychological and physiological impairment in the operation of a human system which consequently effects employee behavior at work (Thomas et al., 2006). Employers are significantly affected by their employees' stress and health, and such consequences heavily cost the organization (Beehr, 2014; Parker et al., 2003).

There is extensive literature available on job stress and its capacity to affect the behavior of employees, but barely sufficient literature available on terrorism stress and its consequences in the shape of employee outcomes. As described above, terrorism triggers stress, used explicitly as a contextual-stressor with the "characteristics of the job environment seriously pose a threat to an

individual" (Bader & Berg, 2014). Terrorism stress is caused by experiencing a terrorist incident; it causes severe consequences where employees are unable to deal adequately with normal social or work relations (Hobfoll et al., 2007). The contextual variables are significant to ascertain how employees' attitudes and outcomes occur in a particular way (Johns, 2017). Admittedly, an unnoticeable contextual variable is exposure to terrorism, which affects all who are exposed to it (Creamer & Liddle, 2005). Therefore, it costs organizations and has a dominant adverse effect on employee work-related outcomes (Bader & Manke, 2018; Burke & Cooper, 2018).

For most of the literature on exposure to terrorism, job stress is questionable because of its nature concerned with one-time incidents (i.e. Attentats du 11 septembre 2001) comparing to discontinuous episodes (i.e., in the wake of ongoing events). It is hard to distinguish how precisely terrorism stress and job stress affect the employment outcomes and behaviors in times of onetime incident comparing to discontinuous occurrences. Therefore, the current investigation provides a base to determine possible relationships.

Here the literature review focuses on employee outcomes; it covers employee organizational commitment, burnout, well-being, job satisfaction, and job performance. The arguments behind reviewing are already explained in the qualitative study (Chapter 2). The study pointed out the most salient outcomes, and then these outcomes were studied quantitatively in separate studies. Thus, variables which come up in the first study (qualitative study, Chapter 2) were taken into account for inclusion in the forthcoming research papers. Even though, every research paper standalone provides its literature review, which is comprehensive covering all elements of the latest research in the field. The following section is based on the literature review of output variables pertaining to the study.

1.2.1. Organizational Commitment

Organizational commitment is described as an individual's psychological attachment to an organization (Meyer & Allen, 1991). Organizational commitment studies aim were to investigate how workers feel about their jobs and to find how they become more committed to their organizations (Meyer & Allen, 1991). In prior studies, it is used to investigate employee commitment and engagement. While at the same time offering them services or resources to encounter a better sense of well-being at work (Meyer & Herscovitch, 2001). Organizational studies researchers believe that due to lower organizational commitment, it causes increases turnover intentions, higher absenteeism, and lower job performance (Abdi et al., 2010; Bailey et al., 2016; Meyer & Herscovitch, 2001). Hence, when an employee is under high demanding situation and it is not in one's control, the lower organizational commitment will be the result (Beehr, 2014; Naghieh et al., 2015).

Meyer et, al. (1991) elaborated three-Component Model of Commitment. The model describes in detail that an individual commitment to an organization is related to a mental and emotional state. It has three clearly described elements that have an effect on employees mental and emotional state which has an onward effect on the organization they work with. The three elements are (1) Affection for one's job (affective commitment), (2) fear of loss (continuance commitment) and (3) the sense of obligation to stay (normative commitment).

1.2.1.1. Affective Commitment

This element for job occurs when one feels a vigorous psychological association to the organization and to the associated job that one does (Meyer & Allen, 1991). In affective

commitment, employees likely to identify and attach their interests with the aligned organization's objectives, ethics and sincerely want to be associated with it. As a result, employees enjoy work; it causes higher satisfaction; they feel good and attached to their organization and likely add to one's feeling of affective commitment.

1.2.1.2. Continuance Commitment

Continuance commitment is when one carefully thinks about the advantages and disadvantages of leaving an organization (Meyer & Herscovitch, 2001). An employee may feel that he needs to stay at an organization because after weighing up or perceiving that the loss he would have incurred by leaving it would be higher than the benefit he thinks he might gain in a new role. These perceived losses can be monetary, professional, or social perks an employee receives at his job roles. Research shows that the severity of these "losses" often increases with age and experience (Bailey et al., 2016).

1.2.1.3. Normative Commitment

Normative commitment is all about the sense of obligation to remain attached with the organization, even though one is unhappy in a role or wants to pursue better opportunities (Meyer & Allen, 1991; Meyer & Herscovitch, 2001). Concerning terrorism-induced stress, Ryan et al.,(2003) investigated employee commitment after the 9/11 in multinational corporations in the United States. Because of 9/11 attack, they found employee's had adverse affection for their jobs, negatively attached to their organization, fear of loss and no sense of obligation to stay with the organization. Employees' believe that in times of emergency their organizations provide the

physical security, fringe benefits along with cognitive therapy programs after any bad incident (Alexander, 2004).

Scholars carried out research on terrorism stress, organization, and employee outcomes, especially after 9/11 incident. After the 9/11 attacks, researchers started work on terrorism from an environmental and psychological perspective. So, it was based on a single event, researchers investigated recognizably different psychological responses of employees in this way whereas research in France, New Zealand, UK is also related to some significant events but not discontinuous in this regard. Hence, we compare previous research held in these countries with the present one; it indeed gives a unique approach in that we have investigated employee organizational commitment where terrorist attacks are continuous.

Moreover, terrorist attacks in Pakistan have traumatized people directly and indirectly since the last two decades. Therefore, in this research, employees working in terrorism-ridden areas have been studied. However, there is not much known about such contexts from the employee's perspective. It is covered in more detail in the Academy of Management Paper, Chapter 3.

1.2.2. Burnout

Burnout is an outcome of job stress, described as long-lasting stress at work. It defines a set of signs that result from continuous demands at work. As a consequence emotional exhaustion, cynicism, and inefficacy happen (Hämmig et al., 2012; Maslach, 2017, 2018). In brief, emotional exhaustion is an extreme form of fatigue which occurs when one is under the intense physical, emotional or cognitive strain caused by persistent exposure to stressors (Freedy

& Hobfoll, 2017; Voss et al., 2017). Cynicism or disengagement is an emotional, cognitive or behavioral rejection of the job; as a result, one distances oneself from one's work and becomes cynical about it (Maslach & Leiter, 2016; Yaşar & Özdemir, 2016). Researchers also analyzed burnout in frameworks such as psychological syndrome with distinct signs such as insomnia and exhaustion (Demerouti et al., 2003; Maslach, 2018).

Burnout takes place in situations where demands are high and when there is a threat to employee skills and resources (Freedy & Hobfoll, 2017). They explained the situation in reference to resource loss to an employee. The high demands indeed decline employee resources, with one not sure of having them again. Further experience of decreasing resources can lead to the decline of one's energy level, leading to burnout (Freedy & Hobfoll, 2017; Maslach & Leiter, 2016). Thus, declining energy level affects an employee's health and well-being (Lazarus, 1993). Stress theory emphasizes that through effective coping it prevents an employee from becoming emotionally exhausted, and thus leads become more effective (Lazarus & Folkman, 1984).

Previously, burnout studied in various organizations, such as firefighters (Murphy et al., 2004), nursing (Ayala & Carnero, 2013; Lange et al., 2005; Huffman et al., 2005), and civilians living under the continuous threat of terrorism (Junaid, 2017). Significantly research focuses on demands and resources through a lens of situational stressors, i.e., terrorism. Furthermore, the interaction of stress and burnout process is not widely studied in organization studies literature. There lies a research gap where civilians are living in terrorism-ridden areas caused by terrorism stress and job stress. The interaction between job stress and terrorism stress, in turn, lead to burnout. However, there is not much known about such contexts. It is covered in more detail in the European Group of Organizational Studies (EGOS) Paper, Chapter 4.

1.2.3. Job Performance

Job performance assesses whether an employee performs their job well. It is an important variable and influences organizational success (Campbell et al., 1993). It relates to attaining one's job and pursuing organizational objectives mentioned in the job descriptions which leads an organization towards its aims (Campbell & Wiernik, 2015). Job performance is an evaluation of a single employee's efforts. Therefore it is critical for both employee performance and organizational success (Dalal et al., 2014). Employee performance depends on a variety of factors; it ranges from the external environment to organizational culture and a potential source of stress to an employee (McCarthy et al., 2016). Pindek et., al., (2017) in a review, highlight that employee stress taken from an external environment or various other sources may be too parsimonious which effects employee job performance. There is a sufficient quantity of research available on jobs related to military and paramilitary and other police forces, where the consequences of stress taken from terrorism include reduced levels of performance (Bleich et al., 2003; Burke & Mikkelsen, 2006; Gidron & Gal, 1999). However, the general public employed in services and living in terrorism-ridden areas are not well researched.

1.2.4. Wellbeing

According to the Oxford dictionary (2018), well-being means "The state of being comfortable, healthy, or happy." Well-being includes a range of possibilities and activities aimed at achieving a physical state of being active, psychological fulfilment of one's wishes (Goens, 2017; Naci & Ioannidis, 2015). Well-being as a whole at its simplest level is about personal happiness, feeling good and living safely and healthily.

Diener (1984) developed a subjective model of well-being, which is a well-known model in psychology. It is based upon three various components having the resemblance of wellbeing, i.e., frequent positive affect, infrequent negative affect, and cognitive evaluations such as life satisfaction (Tov & Diener, 2013). These three components of Diener's model contribute to subjective well-being (Galinha & Pais-Ribeiro, 2011). Hence, personal well-being is a starting point and used as the basis for the belief that the way how everyone feels about his or her life (Diener & Suh, 2003).

Well-being is a significant part of employee work and life activities. Under circumstances of work, stress has a severe impact on employee well-being, and its implications run very deep into the mind, body, and soul (Wisker & Robinson, 2018). The subject of well-being has a broad impact on the quality of life at work (Islam et al., 2017; Praharso et al., 2017; Robertson, 2017).

The employee working in terrorism-ridden areas especially care on how to safeguard personal well-being at work. Decreasing well-being is a sign of declining performance which negatively impacts an organization's teams, performance. Lesser is known how terrorism stress affects employee well-being working in terrorism contexts. It is covered in more detail in the European Academy of Management (EURAM), Chapter 5.

1.2.5. Job Satisfaction

Job satisfaction is concerned with the emotional side of one's feelings about the nature of their work (Henne & Locke, 1985). It is "a pleasurable mental state resulting from the appraisal of one's job or job experiences" (Locke, 1976). Most definitions of job satisfaction in general cover the affective feeling an employee have towards their job. A variety of factors can influence

it, for example, the quality of one's relationship with their supervisor, the quality of the physical environment, or degree of fulfillment in their work (Skaalvik & Skaalvik, 2017).

Job satisfaction actively takes place when the work environment encourages intrinsically motivating characteristics to the employee. Research shows that the phenomena of the job (i.e., the intrinsic part) are a powerful predictor of job satisfaction (Yousef, 2017) which will continue to hold an employee in the organization (Judge et al., 2017). Job satisfaction has been studied with many antecedents and found a correlation with personality (Schaumberg & Flynn, 2017), job stress (Henne & Locke, 1985), work role (Bailey et al., 2016), and absence (Schaumberg & Flynn, 2017). Many work-related factors cause stress which in turn affects job satisfaction and vice versa (Bailey et al., 2016; Bal & Boehm, 2017; Schaumberg & Flynn, 2017).

The results of the limited literature review which has looked at stress and job satisfaction are unambiguous. Bader and Manke (2018) found that terrorism-stress and job satisfaction had an inverse relationship. As such, there appears a need to explore these relationships further to understand how employee job satisfaction is affected in terrorism-ridden areas.

1.3. Other Variables Involved in the Relationship between Terrorism and Job Stress

Literature give information on other variables in the context of the study which may moderate the relationship between terrorism stress and job stress for employees. Similarly, literature also supports some other variables that may mediate the process between terrorism stress and employees job outcomes working in risky areas. These variables are discussed below.

1.3.1. Perceived Organizational Support (POS)

POS is regarded as the organization's contribution based upon a rule of reciprocity with employees. When employees tend to perform better, they receive favorable treatment and rewards in return (Eisenberger et al., 1986). Hence, organizational support is based on the premise of mutual benefits which is transactionary in nature for organizations and employees respectively (Eisenberger et al., 2001; Kurtessis et al., 2017). Employees develop POS so that they achieve acceptance of their needs from their organization (Aselage & Eisenberger, 2003). Employee efforts in return help the organization achieve its goals (Eisenberger et al., 1986; Kirkland et al., 2017; Kurtessis et al., 2017). As a result, POS has been found to have essential consequences on employee behavior and their well-being.

With this in mind, working in terrorism-ridden areas is a big challenge for both employees and employers. Employees expect organizational support because of the stress incurred, which could be negatively affected by a sense of helplessness in the event of exposure to terrorism. Employee stress can be reduced if employees perceive to have greater support from the organization (Kurtessis et al., 2017). Organizational support programs from employers may have positive effects on employee's well-being, performance and organizational commitment (Conway, 2015; Kim et al., 2016). It lessens related stress on employees and moderates the relationship between stress and performance of employees (Chan et al., 2017).

Organizational support may enhance one's capabilities to face adversities or minimize loss cycles (Hobfoll, 1988). This is regarded as a significant factor because of its link to one's well-being (Hobfoll et al., 2007) which is related to positive feelings (Ruzek, Maguen, & Litz, 2006). Positive feelings gained from support becomes a strong segment when dealing with contrary

psychological damages that one experiences from a terrorist wave (Hobfoll et al., 2007; Ruzek et al., 2006). Social support programs at all levels increase the overall resources at the individual level, and it favorably impacts the organizational outcome (Baruch-Feldman et al., 2002; Uchino et al., 2012).

At length, the discussion leads to the argument that the perception an individual gain from various support programs at the organizational level may impact employee organizational commitment. We expect that perceived organizational support may moderate employee terrorism stress and organizational commitment. Based on stress theory (Lazarus and Folkman, 1984), POS helps regain resources, which are likely to help reduce the detrimental consequences of stress due to terrorism. The relevant literature gaps lead to the posting of the following research questions:

- What is the nature and role of social support for employees working while living under terrorism stress in terrorism-ridden areas?
- What employee perceive of social support, are these perceptions beneficial?
- Does social support buffer the influence of stressors on outcomes?

1.3.2. Sensitivity to Terrorism (STT)

In the workplace environment, where discontinuous incidents are apparent, it increases the fear that has an onward effect on health and wellbeing of employees (Burke & Cooper, 2008; Greenberg et al., 1986). According to Terror management theory (TMT); terrorism incidents in general cause stress and in particular, have mixed feelings of vulnerability (Greenberg et al., 1986). In this regard, some individuals working in dangerous areas may tend to be more sensitive

and affected by terrorist incidents while others may show a less sensitive reaction towards the situation (Lazarus, 1995). It predicts an adverse effect on employee outcomes (Greenberg & Dunning, 2012).

The sensitivity to terrorism may have various consequences on employee work attitudes. In his research, sensitivity to terrorism is negatively related to employee work attitude. It is anticipated that individuals who have a higher sensitivity, will react more strongly to the organization's set of measures and vice versa. Besides, sensitivity to terrorism may moderate the relationship between effort-reward imbalance and facets of burnout in the sense that higher benefits should be associated with lower job burnout in the study context.

Here we propose in the light of terrorism literature that it may be used as a moderator through which higher sensitivity to terrorism increases burnout among employees and vice versa.

1.3.3. Rumination

Rumination is defined as repetitive thinking about the causes, situational factors, and consequences of one's negative emotional experience (Nolen-Hoeksema, 1991). Rumination is likely to influence, how one appraises stress and it further causes one's behaviors. It is found to increase employees' stress, which ultimately leads to negative outcomes (Bratman et al., 2015; Hamilton et al., 2015).

The stress appraised from terrorism events in terrorism-ridden areas is significant factor forcing rumination in the minds of victims and indirectly to societies and employees working or living in such areas. An upsetting experience is the result of repetitive thinking in one direction negatively. Adverse life events open up rumination and terror events are significant boosters of

negative thinking (Luminet, 2004b). Furthermore, exposure to terror has a relationship with rumination (Horowitz et al., 1979), rumination expands distress which can lead towards depression (Nolan et al., 1998; Nolen-Hoeksema & Morrow, 1991). Depressed people are least effective, have lesser concentration at work and have lower organizational commitment.

Here we propose in the light of rumination literature that it may be used as a mediator through which exposure to terror leads to increased rumination which will further lead to lower employee commitment. We expect after this that the direction of the process will occur like; exposure to terror increases rumination, and it will lead to decreased commitment. The relevant literature gaps lead to the following research questions:

- What is the nature of ruminations for employees working in terrorism-ridden areas?
- What role does rumination play in explaining the detrimental influence of terrorism stress?

1.3.4. Organizational Justice

It refers to employees' perceptions of fairness in the workplace (Greenberg, 1990). They gave a detailed account of four categories having shared characteristics and based on employee understandings and perceptions. Name of the four types of fairness are; distributive, procedural, informational, and interactional fairness at work. While distributive justice represents employee understandings concerning the fairness of outcomes. Whereas procedural justice represents employee understandings of treating processes equally that lead to these outcomes. The third type of justice, informational justice, relates to the accounts provided for justice-related events

(Elovainio et al., 2005). Finally, interpersonal justice reflects perceptions of interpersonal interactions and treatment (Greenberg, 1987).

According to Coquitt and Shaw (2005), prior research validates that all types of justice are though correlated, these also have an effect on employee work-related outcomes. Whereas this classification represents past theories that desire to obtain, establish or indicate rules equally applicable to everyone. These fairness rules are useful indicators of the fairness of procedural outcomes, interpersonal treatment, and more contemporary perspectives have cast a broader net. Prior literature on the organization justice construct has focused on the degree to which employees view themselves as fairly treated, more recent theories consider employees' reactions to the treatment of others (Ambrose & Schminke, 2009; Colquitt et al., 2005; Elovainio et al., 2005). In this regard, more research is required on the justice construct because it is important for employees to see how they are treated working in risky areas.

Research has suggested that organizational justice can be used as a mediator in organizational behavior research (Elovainio et al., 2005). As a matter of fact, unbalanced exchanges concerning to risky areas between efforts and rewards makes the work more unpredictable, the notion of uncertainty due to terrorism uniquely determine the adequacy of the effort-reward ratio (Elovainio et al., 2005; Van den Bos & Lind, 2002). In particular, when environmental uncertainty increases and effort-reward imbalance is high, in this context employees are more likely to have a sense of unfair experience that leads to poor health and well-being. Contrary to this fair treatment among all employees makes working somewhat more effective, enhancing the motivation among employees (Elovainio et al., 2005). The relationship between organizational justice and employee well-being reinforces the notion of fair justice,

making employees more prone to work and less exhausted at work (Elovainio et al., 2005; Bos et al., 1998). As an illustration, organizational justice will increase the balance between effort-reward ratio, having lesser health related problems. Thus, in this research, organizational justice is predicted to play a mediating role. The relevant literature gaps lead to the posing of the following research questions:

- What is the nature of organizational justice for employees working in terrorism-ridden areas?
- What role does injustice play in explaining the detrimental influence of terrorism stress?
- Does organizational injustice process influence on employee outcomes?
- What role does organizational justice play in explaining the detrimental influence of terrorism stress?

1.3.5. Resilience

According to the Oxford Dictionary (2018);” resilience is the capacity to recover quickly from difficulties.” It is an asset that helps an individual to face adversities and recover quickly in stressful times (Luthans et al., 2018). In the workplace, psychological resilience is seen as a protective factor used to reduce risk within an individual’s environment (Chen et al., 2015). It allows them to stay focused during stressful times and let them move on without severe long-term effects. Lack of resilience cause stress, and predicts poor employee work outcome (Long & Bonanno, 2018).

Besides, discontinuous incidents may diminish the resources of employees, and it affects employee health and wellbeing working in risky areas. We suggest resilience may serve as a

pathway through which ongoing terrorism leads to lower employee wellbeing while we expect resilience will mediate the relationship between terrorism and employee wellbeing. Resilience is used as a mediator because in the literature it is found as a psychological resource and enhance employee resources.

Key Research Gaps and Chapter Summary

Terrorism has spread in many countries and remains a huge threat (Bader et al., 2015), and it is widely understudied in the organizational sciences (James, 2011). With ever-growing threats of terrorism, it is likely that this will detrimentally influence employees' health and well-being (Bader et al., 2015). Researchers have not focused on the nature of organizational factors and their relationships with their employees' health and well-being in the context of high exposure to terrorism; this thesis will address this gap.

This study builds on the stress perspective, and it suggests that when employees are stressed, their resources decrease takes a toll on their resources, leading to strain, which can in turn influence employees' performance and job satisfaction (Lazarus & Folkman, 1987). Based on stress theory and organizational support theory (Eisenberger et al., 1986), these personal and organizational resources may be helpful in reducing the job stress that employees experience in their organization. Since these have not been widely researched, especially in non-western cultures, this study aims to understand their interactive/additive effects on employee outcomes.

Besides, there are other gaps in extant knowledge around the possible roles of Rumination (Nolen-Hoeksema, 1991), Organizational Justice (Greenberg, 1987), and POS (Eisenberger et al., 1986), and their potential mediating/moderating effects on the relationships of job stress and

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

Indeed, working on this topic is full of challenges, and there is a greater need to address more issues including terrorism (Jonkman & Kelman, 2005). This research thus attempts to explore the extent to which terrorism influences employees working in organizations in terrorism-ridden areas. It aims to answer questions as to how far people have been stressed by terrorism. Furthermore, this inquiry seeks to determine the influence of terrorism and job stress on employee health, behaviors and well-being.

Given its coverage and gaps, existing research on terrorism provides some insights about its effects on employees and organizations. However, earlier research findings do not focus on employees working in terrorism-ridden areas. The literature on job stressors is detailed but lacks contextual insights (discontinuous incidents) concerning how employees live and are influenced by terrorism and job stressors.

Therefore, the outcomes of job stressors, the stress of terrorism are not uniformly or equivocally known. The review in Chapter one highlighted that it is unclear which results might be relevant or most strongly affected in this particular context. So qualitative study needed to check these concepts which are discussed in next chapter.

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Chapter 2: Employee Stress in Terrorism-Ridden Areas; A Qualitative Research Study (EURAM, 2019)

Objective

The purpose of the comprehensive literature review was to find out relevant gaps to address it in the forthcoming research work. So, in this thesis work, the first study needs to begin with approaches that produce the contextual meaning of how the stressors influence employees working in terrorism-ridden areas. To study the contextual meaning of stressors we have qualitative study.

Accordingly, the qualitative research conducted solely to explore the exact nature of the data, i.e. questions that researcher asked from the respondent with the aim to obtain information on existing concepts. The purpose was not to create generalizable findings but to attain detailed insights (Guest et al., 2006). These concepts later helped to recognize and choose proper measures that can be then tested on larger scale in empirical studies.

Introduction

Terrorism incidents are regarded by many to be sure to happen in Pakistani cities, especially in the western and northern parts. Being an ally to the international community to eradicate terrorism after 9/11, Pakistan has lost many valuable lives. For example; on 8th August 2016, a suicide bomber took place at a hospital in Quetta in which 74 people were killed most of them were lawyers, approximately 150 people were injured. On another attack, which took place in Peshawar, December 2014 by a terrorist group at the Army Public School in which terrorist killed terribly at least 141 school kids, administrative staff, and teachers of the school. In the first place, it is seen in these attacks that terrorists target persons who are innocent civilians. In both incidents, terrorists hit employees of various sectors and infrastructure(s) in the form of school children, staff, school, and hospital employees. Of the many impacts on organizations as a consequence of the situation of exposure to terrorism, the change of employee health and wellbeing are the most concerned for the organizations and employers. Employee health and wellbeing are at increasing risk, who are employed in areas affected by terrorism incidents (Howie, 2007).

Generally speaking, there is no officially agreed or accepted definition of terrorism that exists. According to the Oxford Dictionary (Dictionary, 2016), terrorism is defined as “the use of violent actions to achieve political aims or to force a government to act.”. Drawing on the existing literature and based on the research questions upraised in this study, we have analyzed the impact of exposure to terrorism and its respective risks that take place on employees working in terrorism-ridden areas. Thus, the literature is examined and through detailed interview session

(qualitative examination) it is investigated on how terrorism influence employee health and wellbeing and how it effects on organizations?

We collected data (qualitative and quantitative) from Quetta and Peshawar (please see map of Pakistan below). Both cities are the provincial capitals, and together are the largest cities of both provinces (provided in the map 1). Located near the Pakistan-Afghanistan border, Peshawar and Quetta are trading and communication centers between the two countries. In addition, the cities are near the Bolan Pass route which was once recognized as the major gateways from Central Asia to South Asia. In the same way, both cities played an important role in the intermittent Afghanistan conflict. While, people of Peshawar and Quetta (provincial capitals) have seen the most discontinuous incidents, kidnapping, suicide attacks and bomb blasts. Due to terrorism incidents in Peshawar and Quetta, politicians including thousands of common masses got killed in various incidents. The overall share of the terrorism incidents in both cities according to the Provincial Counter Terrorism Departments (CTD) are 42%.

Therefore, employees of educational institutes were interviewed taking a sample from two cities i.e. Quetta and Peshawar. Preliminary research findings from interviews conducted are presented in the study. In this context, the aim of the study was not to create generalizable results but to gain detailed understanding of various employees view of reality from different perspectives related to employee stress working in terrorism-ridden areas. Further, the nature of the questions also encouraged greater clarity in providing information regarding the terrorism stress context, as well as regarding the nature and relationship of job stress and changing employee behaviors.

Map of Pakistan



2.1. The Case of Pakistan

It is imperative to point out a difference between victims who faced loss or damage in an (attack), and the one who live most part of their lives in a region devastated by exposure to terrorism. This difference is necessary for understanding the stress caused by terrorism. The literature shows that the attacks of September 11 had a upsetting impact on the psychology of the whole USA (Argenti, 2002; Ryan et al., 2003, p. 11). People were physically and emotionally weak, they could not understand the cause, and they were in a painful change process.

Employers, especially in large cities simply realized that they were in deep danger. After the attack, it became clear that the world had changed because of the security measures taken by various countries.

As a matter of fact, 9/11 sentiments spread throughout the globe especially in Pakistan, as it played a leading role as a frontline state in Global War on Terrorism. Experts, politicians, and research scholars to a higher degree hypothesized the likelihood of similar attacks as a consequence of performing a frontline role for Pakistan. Consequently, Pakistanis gradually experienced a change in the country's security landscape, especially metropolitan cities, citizens built gated communities on their own, government deployed security and armed forces everywhere with bulletproof gadgets. The forces started intrusive stop-and-search pickets, and anxious citizens waiting in long queues for their turn and so on so forth. All these characteristics generate an almost perpetual sense of fear amongst the citizens and are a stark reminder of the monster of terrorism that stalks the cities.

Terrorism in Pakistan become a highly destructive phenomenon after becoming an ally with the US. As a result of terrorist incidents, the death toll rises from 56 in 2002 to 3318 in 2009. Over 60,000 people have been killed, and caused economic condition totaling US\$118.3 billion (Govt of Pakistan). For Pakistan, even after sixteen years of active participation and trying, there seems to be no end to these incidents. In fact, the threat of terrorism in Pakistan has increased manifold and, as a result, there are many serious implications of this for the country. Henceforth, Pakistan is paying a huge price because people are living under continuous stress in terrorism-ridden areas. Keeping in mind the fact people have to support themselves and their families in these areas. While little is known about how they carry on their daily life activities or

of how stress affects these workers and workplaces. In line with Soomro et al., (2018) proposed future work direction on terrorism and its possible outcomes for employees working under the shadow of ongoing terrorism and how it possibly affects employees, this research will explore the question how employees are affected working in terrorism-ridden areas.

2.2. Terrorism Stress and the Human Consequences at Work

Stress is a consequence of "imbalance between demands and resources" or as occurring when "pressure exceeds one's perceived ability to cope" (Lazarus & Folkman, 1984). As stated in the stress framework above, it is based on the premise of the transaction between people and their environment. While, people working in risky areas experience health and psychological changes on regular basis which push their attention away from workplace. Lack of attention is a key reason of decreased employee performance and satisfaction. Hence, stressful incidents can become stressors for employees and has a significant negative consequence on their behaviors.

So, the argument in this study is that employees working in ongoing terrorism may subjected to undergo worse in the form of resources i.e. personal, physical, psychological, social, and other financial resources. Examples include loss of a family member, colleague, material loss and financial loss, security of a job, lack or no chance of investment opportunity because of external climate, loss of employment due to a process of closing business or being unable to go to social places due to the lack of security. In general, according to the premise of the stress framework, all the examples lead to negatively cause an employee behavior especially in the context of this study.

2.3. Research Context

The research on terrorism areas is limited in many ways. As we have seen in the earlier research that terrorism effects are largely unclear and it has not explored how it effects employee health and wellbeing (Bader et al., 2015). For instance, earlier research on incidents are general, it provides surface descriptions of related problems. While, existing research is based on a single incident, its consequences focuses on a western context (Ryan et al., 2003, p. 11). In addition, previous research on terrorism is relatively based in stable environment. Hence, in this study, through focused investigations we analyzed the influence of exposure to terrorism and how it is causing employees at work (unstable environments). Moreover, earlier literature refers mostly to the United States 9/11 attacks that are examined thoroughly in this research. While this research is conducted in two cities of Pakistan i.e. Quetta and Peshawar.

As previously stated, Pakistan is a country severely affected by dangerous attacks, it is showing great distress among people and an average death toll of 2,500 every year for the last decade (United Nations, 2012). Pakistan's workplace context is ignored in academia due to various reasons stated above. Yet, the workplace environment has similar appearance which are common and shares similarities with other workplaces around the world. There are multinational corporations (MNCs), well renowned national and international product chains.

Likewise, employers expect performance from employees as the employers around the world have performance expectations from their employees. They set targets according to employee job descriptions in various context in a particular time. However, comparing job descriptions of stable environments to unstable environments (risky areas) is a challenge because working in unstable environments (risky areas) cause distress to employees that effect their job

descriptions which has onward effect on achievements of employee targets (Gilboa et al., 2008). In this way, when employees have to work and live with the constant threat of terrorism, along with job pressures from the employers, this can negatively cause employee behavior at work and their performance may be affected (Junaaid, 2017).

2.4. Methodology

This research is the result of semi-structured interviews. We used it, to get an in-depth analysis of the conceptual framework on the subject. Interviews were taken from December 2016 to February 2017. Twenty-two people took part in the interviews taken from eight educational institutes in two sample cities (Peshawar and Quetta) following the attacks of Army Public School (December 2014), and so many attacks of similar nature occurred discontinuously. Out of twenty-two purposive sample respondents, three of them were affected in these attacks directly, the rest of all were indirectly affected.

It is observed that conducting research in terrorism-ridden areas is challenging due to terrorist threats and attacks (Bader & Manke, 2018a). The terrorist actions pose threats to all marginalized people including researchers making it hard to reach the study locations and conduct research. Researchers working in these areas face difficulties in their daily work and they can not go out freely to observe things and inquire people. For example, some researchers and academicians kidnapped in these areas and their families face increased threats in their daily lives. Likewise, some academicians have unfortunately lost their lives and many more left their homes and moves to safe places because of fear, threats, and kidnapping. These are some prime reasons that pushback researchers, as a result they do not come forward and work in these areas. Concerning to this research study, after considering all the issues associated mentioned above, it

compelled researcher to work on this topic as a challenge to pursue new scholarship and contribute towards the humans and to the academia.

In this work purposive sampling was used to explore the process by which how terrorism stress arises in greater details. As described above the difficulties and hindrances associated with data collection, we chose this sampling method for both cities. It is important to mention here that researchers cannot freely ask from random respondents, while people are also frightened to reply to any strange person because of threats associated to their life. Hence, through purposive sampling, it was relatively easy to carry on this work for researcher and to ask people who wish to openly say about what they feel and experience working in these areas.

Thus, in the beginning, six interviews were conducted, and through chain-referral sampling, another sixteen future respondents among their acquaintances were recruited. All the interviews conducted later transcribed. The semi-structured interviewing method is intended for obtaining comprehensive information, it is a useful method in receiving contextual comprehension among available variables (Silverman, 2016). Moreover, all contacted persons for the study greeted to openly discuss as one wishes all aspects of the employee, organization and about stress and how it is affecting their health and wellbeing at the workplace.

Interview guide for recording viewpoints from the respondents was based on the following questions;

- *What define your job roles and responsibilities?*
- *Who is an employer in your organization? & what is the course of action(s) they are obliged to pay to the employees?*

- *What is terrorism to you? how it affects you while working and living in terrorism-ridden areas?*
- *What does the organization support you in tough times? Does organization provide you training in the face of adverse life events? Does organization carry on its obligations?*
- *What are the probable causes (both internal & external) of an organization's in case of failure to fulfil its obligations?*

Here probing technique was applied. Once a specific theme was identified more probing questions were asked. All interviews took 25 to 35 minutes. The respondent population included fifteen males and seven females. Moreover, all agreed fall down between the age of twenty to forty years. For the process of developing themes, at first six interviews were carried out that leads to a further process of organizing interviews afterwards. After the addition of the new interviews conducted, it was checked whether additional themes emerged or not. Eventually, some sub-themes become visible as a new one but not sound like a new one. I make sure from others that what I was saying was like other participants in similar contexts and most of the part it was echo going on. Further, I had to pull myself out sometimes and be careful that I did not get too into what employees were experiencing and what they were telling me, and I had to just let their story but not let my voice get in there. So, I took measures as I could for my qualitative work. So, anyone who reads it can decide for themselves if this is something then can apply to their own context. All answers to questions were converted into codes according to the process of thematic analysis and then we categorize them. The analysis gives special importance to absolutely precise degree to recording patterns inside the range of data. (Glaser & Strauss, 2017). The recording patterns (themes) emerged from data are of great significance and portray what respondents spoke on account of a research question (Lewis, 2015).

2.5. Results and Discussion

The study aims to examine the impact of exposure to terrorism for employees working in dangerous areas. This research is appropriate to the working environment where the threat of terrorism is realized, and it reaches the required standard by assessing the attitudes and behaviors of employees working there. The question covering a larger scope of the subject have following key influences which are apparent in the respondent's answers (themes); terrorism stressor, job stressor, psychological wellbeing, poor health, injustice and changing employee attitude and behaviors.

2.5.1. Theme 1: Terrorism Stressor

Most of the respondents shared similar views like terrorist attacks on Army Public School (APS), Peshawar. Respondents described attacks and its impact for example *feelings of vulnerability, terrorism stress, anxiety leading to high occupational stress and low job satisfaction* (male, 27, Peshawar). People working in organizations felt emotional threats and physical attacks for an extended period of time because of the attacks.

Similarly, employees also shared their experience that they suffer from terrorism stress a lot, it holds their minds and adversely affecting their wellbeing. They also additionally expressed that employers are not showing emotional sympathy and not providing support to them in these difficult times. A university employee (male, 30, Quetta) commented: *“working in terrorism-ridden areas, is a hell of a job, according to me terrorist attacks are a much bigger source of threat and when you have no support/security from your employers.* Other employee shared (male, 32, Quetta) *there is a great threat working at targeted area, I am unable to think properly*

and feel physical and emotional shock. Another employee expressed her feelings and experience, (female, 35, Quetta) stated, *“employees manage their work stress by paying more time learning skills enabling them to function properly in the office, in the case of working in dangerous areas no matter what an employee prepare is ultimately not in their control to cope with terrorism”.* Such observations from employee showed their state of mind in which they experience work stress ultimately leading to lowered wellbeing.

The result of the respondent’s data shows that the terrorism as a stressor has a negative effect on health and wellbeing so effecting their work outcomes. It becomes apparent after detailed examination from the employee data that the stressor “terrorism” was based on (1) experiencing terrorist attack directly at work or experienced direct loss of life of a family member or co-worker and (2) experienced incidents indirectly, especially when passing by areas for office or going back to home after attending office. People experienced fear in a crowded place too because of the factor of terrorist involvement and their disastrous activities. In addition to this, they experienced disgusting scenes and momentarily lose balance when heard blast and gunshots, sirens in the distance.

The terrorist attacks endure over a long period of time and its adverse effects lessen the health and wellbeing of the workers (Canetti-Nisim et al., 2009). Workers who are touched by terrorism incidents change organizations and professions from areas where terrorism is ongoing to peaceful areas and focus on their family goals (Bader & Berg, 2013). Unlike employees who are touched terrorism incidents move peaceful areas, employees who continually work in these areas encounter stress which is obvious to other colleagues, in the shape of depression, anxiety, post-traumatic stress disorder and other mental illnesses (Toker et al., 2015). One precise sample

of facts can be seen in the Oklahoma City bombing, as a result of the employee were distracted, they left jobs, not attending offices and remained absent frequently (Alexander, 2004a). Similarly, a terrorist attack on the Army Public School (APS) in December 2014 in Peshawar where 149 children including staff were killed shared these experiences. The terrorist attack on APS touched the feelings of whole Pakistan and leaves endure experience all over the country. Added consequences of working in these areas; low feelings to work, lower job demand for high profile positions, lower productivity, and lower wellbeing of the employee are recorded.

Moreover, as a reality of horrifying terrorist attack of 9/11, Mainiero and Gibson (2003) yield survey data related to emotional vulneraries that contained 5860 participants. Mainiero and Gibson (2003) argue; *The 9/11 terrorism was a tragedy, caused physical and emotional pain which will endure for all people especially working in corporations and rest of America. The great extent of loss in the attack left us completely traumatized.* People showed three emotional response outputs and showing their observation described as fear, denial, and anger (Mainiero & Gibson, 2003). They presented themselves reporting as having great fear working at the attacked area and described themselves in the state of ‘daze’, denial feelings becomes apparent, the symptoms of co-workers who said that they have trauma as a result of terrorist attack and anger which was focused towards the organization stakeholders with the perception of not expressing emotional sympathy.

Hence, in this research i.e. Peshawar and Quetta, following themes identified after the detailed analysis in terrorism theme: loss, fear, the risk associated to one’s life and family members and daily stressor. The respondents in these cities apparently consider themselves vulnerable because of the factor of ongoing terrorism, causing significant stress and making their

life miserable at home and at workplaces. Now, we briefly present terrorism stressor themes one by one.

2.5.1.1. Loss

Academic and non-academic division staff explained a suicide bombing and shooting attack that occurred at the Army Public School (APS). At the beginning of a workday, six guns men conducted heart-wrenching and most shocking attack leaving 149 dead including 132 school children. The nation through media broadcast heard the shocking attack on school and children. Everyone there was yelling and screaming. A female school teacher survivor explains this as; *“The gun fires and blasts were horrifying, and suicide bomber exploded with a very loud, almost ear-piercing and shocking sound. That was the moment when I lost my senses and later on, I remember I was in the casualty ward of the hospital. I have in mind that it was a powerful terrorist attack. Due to the powerful terrorist attack, people were lying dead in school premises.”* (female, 37, Peshawar).

2.5.1.2. Fear

Most employees during the interview described their opinion that terrorist attacks are not easily forgotten and fear will remain for a longer time. Many believe that they would be safer at home as terrorist rarely target homes and that is the reason employee stay safe or with minimum fear and remain safe. An employee described *‘no-one dies of terrorism in the home’* (male, 31, Peshawar) *is the indication that home is the safe place form him.* This shows element of fear that exists in surroundings. However, some employees shared everyone is aware of terrorism days, and comparing now it is getting better day by day *again mentioning nobody never know what*

will happen in future. We must remember the sufferings of the last few years so much that it cannot move along lightly from our minds. (male, 36, Quetta). Hence, it is clear from the responses that fear cannot go along with a happy, satisfying and stress-free working environment.

The threats have worsened feelings of anxiety and increased fear in workplaces in cities. The terrorist attacks which started when Pakistan becomes an ally to the US after 9/11 created general perceptions of a riskier Pakistan and with the passage of time it becomes like the policy makers thoughts. During the interview with the respondents, *they said they think that fear is ever-present, using phrases such as fear of discontinuous incidents.* Normally no one get used to unpleasant emotions caused by terrorist attacks and when it is all the time in minds and its negative consequences to oneself and family then it becomes worst. Hence, negative consequences affect employee in the shape of increased absenteeism, lowered performance, increased burnout, lowered organizational commitment at workplaces (Reade & Lee, 2012; Toker et al., 2015).

2.5.1.3. Risk to life

Previously people perceive due to many casualties that it might be their turn next time, and no one is protected from the alleged dangers of daily life in the cities. *Fifteen employees recognized the reality that rising civilians' casualties gave us the message to stay away from the offices and remain at homes or pushing us to flee to the other cities.* A female employee working in a University described this as; *Due to suicide attacks and media coverage from the aftermath showed dead bodies lying on attacked areas, give a message to stay away from work and remain safe* (female, 34, Quetta). It is clear from the respondent's answers about the risk of life to

oneself and to other family members and their priorities of staying away from workplaces and connected to entire family members.

However, employees also recognized the current position of these cities like; Everyday life is coming back to normal due to some strict policy measures from the Government. Recent reports show the declining trend in casualties in mentioned cities. Employees recognized the quality of life improved in the city. Employees do believe that the impact of previous attacks are still there, and it will remain for a longer time.

2.5.1.4. Daily stressors

Eight employees described the role of daily stressors associated with the experience of going to attend their offices. This daily routine impacts' employee mental health and their wellbeing. A male employee explains this as; *Overall, I think moving from home to attend office is a miserable experience on regular basis because that is something one has to go along all the way with fear. We cannot do anything to stop terrorist attacks*" (male, 25, Peshawar). This suggest that displacement-related stressors, accounts for a great deal of the unexplained variance in levels of mental health to the employees which has onward consequences on employee work outcomes.

2.5.2. Theme 2: Rumination

Overall all employees were ruminator. They think deeply about stress that makes them unhappy and worried about children, and their family. They described the role of rumination in their daily lives and described as; *It is bad for me, I feel depressed after seeing any news of incident and it lasts for weeks* (male, 25, Peshawar). *I do not cry in my life, but I cried a lot when*

I saw APS incident (female, 32, Peshawar). Here due to helplessness, rumination arises, and it arises continuously to a person who ruminate.

Rumination is called when someone anticipates negative events, think deeply over and over, trying to analyze it and determine its source (Hamilton et al., 2015; Edward R. Watkins, 2009). It was evident from the employee responses and it supports our notion of rumination. As a matter of fact, people become helpless at any moment when they fail or lose. As an illustration, *I am worried after the APS incident, I think terrorist can target anyplace and I might also be the victim of such incident in future* (male, 31, Peshawar). Ruminator people feel sad, the future looks miserable and putting out any effort seems overwhelmingly difficult.

Putting it into the context of working in terrorism-ridden areas, employee thinks a lot about their issues and negative consequences to them, consequently, it turns into rumination which aggravates it. A loss or losing of loved one teach them that they are now vulnerable, and things are out of their control. For example, Army public school employee described this situation when they lost 149 school children including staff and its effects remained lasting and create rumination. Comparing to 15 men, and 07 women described repeatedly about the APS incident, which shows that they suffer rumination.

2.5.3. Theme 3: Organizational In-Justice

Six employees shared their experience about organizational injustice as, *employers are treating employees in a separate way in the same organization and in the same situation. Although rules must be same and all employees must be treated equally working under the same organization, we have separate rules for various. An employee at managerial level receives all*

the benefits from the top management, while it is just the opposite for lower level employee. Lack of communication and unfair treatment to lower level employees lead them to stress factor (male, 29, Peshawar; male 26, Quetta).

Overall there was support for ‘discrimination’ in this research from the employers. It has identified when discrimination occurs it causes mistrust in organization members (Colquitt et al., 2005). Most of the employees perceive that organizational processes are different for various levels of employees. Due to different procedures, employees perceive they are been discriminated. While, failure to prevent discriminatory process can have significant consequences in the form of lower satisfaction, high absenteeism, turnover and performance, which cause organization performance (Jerald Greenberg, 1987).

2.5.4. Theme 4: Work Stressors

Employees reported their job is extremely stressful working in terrorism-ridden areas. We found strong support for the theme of job stressors. As an example; employee answered like (female, 25, Quetta) *“I feel like workload as the number one stressor in my job. I am working as an admission counselor representative. In my job, I receive calls continuously without delay. The nature of my job is to listen to queries related to admission process and provide them proper advice. For providing information to the students, I need to discuss it with my immediate supervisor to make it easy for me if I am going along with the institute's policies. In the office, we do not have enough time to talk to another colleague as we stay busy all the time. Also, there is a factor of exposure to terrorism which makes things worse when coming and going to the office on daily basis. All of the things make me physically and mentally ill”*. The employee described in this situation; excessive workload and other demands and environmental issues and that kept for

analysis. It shows and emphasizes the importance of individual job stress and its consequences, working conditions and activities related to that causing job stress. In whatever way, individual factors and its function cannot be ignored. According to the above example, stressful working conditions may strengthen and have a direct correlation which impact workers health and wellbeing (Gilboa et al., 2008). The role of contextual factor (exposure to terrorism) is also strengthening and have a negative consequence on working conditions.

2.5.5. Theme 5: Employee Attitude and Behavior

Respondents recorded their statements as some said it is job stressors which are influencing their performance while others said that terrorism stressor influencing more than job stressor. Their responses reflect how they feel about something. Overall, respondents described that job and terrorism stressor (both) influenced their behavior in the organization. Keeping in view the working in terrorism-ridden areas, according to respondents' views, terrorism stressor affecting more than the job stressor to the employees. Following analysis reflects how employee feels about various consequences related to job satisfaction and performance, OCB, absenteeism, and turnover.

2.5.6. Job Satisfaction and Performance

Respondents replied that terrorism is painful and it negatively influencing their performance. They said they have suffered physically and mentally. It has caused people and their everyday lives. For example; an employee (male, 33, Peshawar) said, *"I am scared because we know the truth about terrorism incidents that took away lives of around 149 employees in one incident. It is the most deadly and worst incident in Pakistan's history. It is a kind of stress and*

has a long-lasting impact on the memories of APS employees and students and they cannot concentrate on their work and ultimately their performance is affected”.

The respondents shared their views that *they are not happy working in the terrorism-ridden area*. As they have no peace of mind, it is affecting their performance. Lack of safety is the reason that affecting their behaviors. Research shows that the relationship between job satisfaction and job performance is positively correlated and vice versa (Skaalvik & Skaalvik, 2017). Hence, employees working in terrorism-ridden areas tend to be less effective than employees working in peaceful organizational setups.

2.5.7. Burnout

Respondents recorded their responses about the workload and role of employers.

Fifteen respondents answered they have long working hours. Keeping in mind the context of working the long working hours actually increase stress level. In this study, according to respondents' answers, it was found that on average, they work 42 hours per week, while other staff works an average of 48 hours per week. As a consequence, of long working hours and workload, they are facing difficulties in their daily life and encounter increased stress and often exhibit symptoms of burnout. The literature on stress and burnout describe this situation and it is well supported (Eisenberger et al., 2016; Thomas et al., 2006). Hence, workload issues and working in terrorism-ridden areas do have an impact on employees' lives.

2.5.8. Absenteeism and Turnover

Respondents in both sample cities i.e. Quetta and Peshawar answered that their job is full of stress due to the factor of ongoing terrorism. They shared their views like *they are become fragile and vulnerable now. They further said that they do not attend offices quite often now.* It shows that life of people are affected in the areas. For example; an employee (male, 30, Quetta) said, *“I stay at home to relax because I know the reality about incidents that can happen at any time in any place”*.

It was found in the data a negative response about the job and increased absenteeism in sample cities for the study. Research shows that employees having negative response are more likely to miss work which is the evidence in this work. Employees in this research have negative responses and they miss their work. While research also shows that employers providing support in the sense of sick leave or benefits are encouraging their employees. For employee’s terrorism—the turnover relationship is also positive as deduced from the views of employees working there. Ongoing terrorism situation is more likely to translate into employee turnover because they will move to safer places with their family. Keeping in view the factors such as people who have high education, abilities is likely to move to safe and sound places and increase the turnover.

Conclusion

The themes extracted have a negative effect on health and wellbeing of employees and all affecting their work outcomes. It shows after analysis that the stressor “terrorism” was based on fear, loss, risk to life and daily stressors. Employees also experienced rumination, organizational

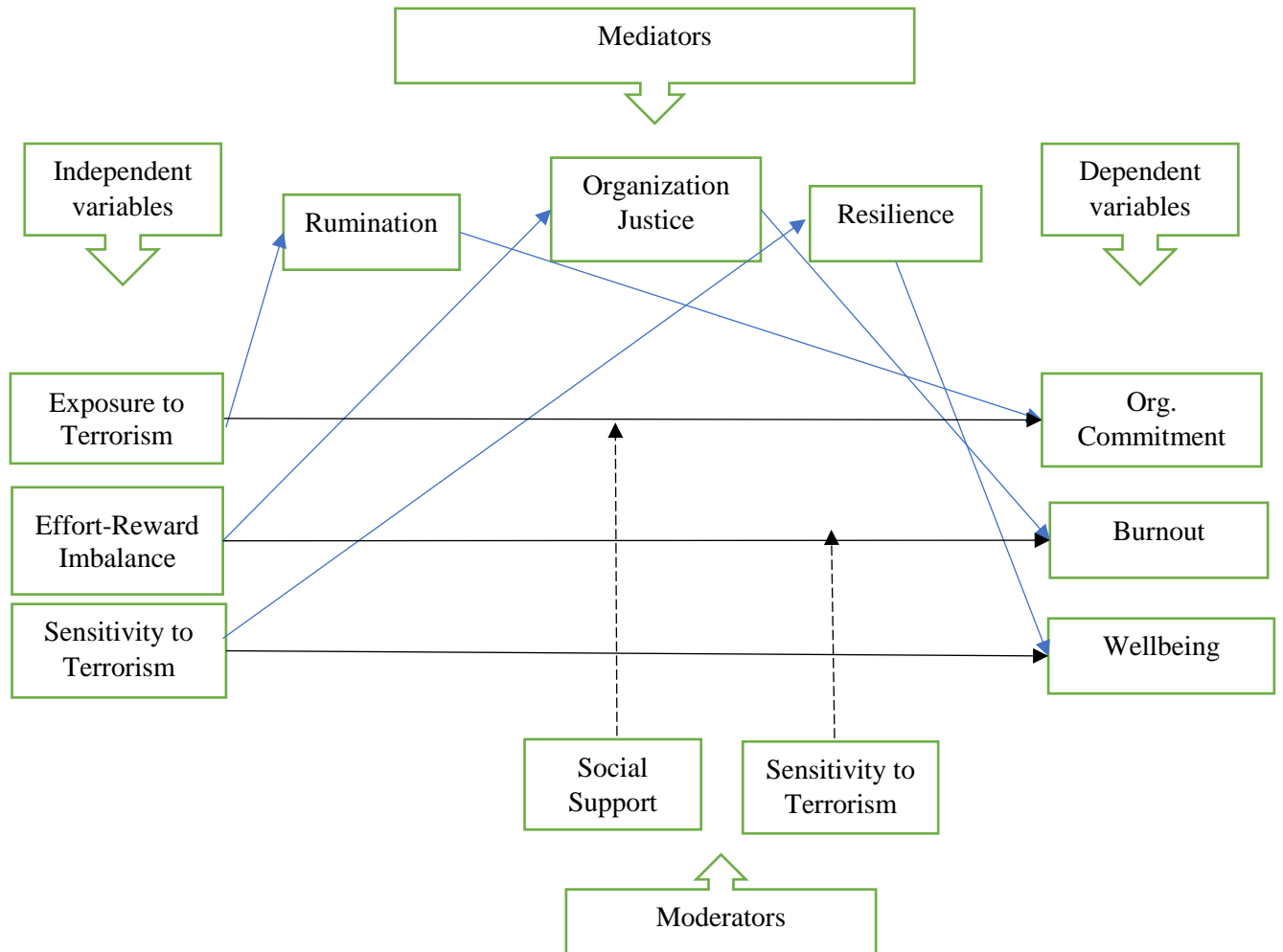
in-justice, job stress and adverse effects on their attitude and behavior. The themes extracted from analysis are unique.

Accordingly, exposure to terrorism need to receive greater attention in business and management research. It has a significant impact on many characteristics of life, including employees' attitude and behavior working in risky areas. Particularly, people living on-going terrorism areas are living at the lowest standard or least or desirable conditions.

The information extracted from the subjective analysis of the interviews is unique and it adds scholarship to the existing literature on terrorism stressors and job stressors. Overall, interviews data, highlighted above, provided excellent support to proceed for the empirical investigation on the exposure to terrorism along with work stressors.

To sum up, a first framework developed below (please see 2.1), drawing on various streams of themes to test and expand it further on larger scale. Hence, the framework presented in 2.1 could not be tested without first being contextually informed.

Figure 2.1 Conceptual Framework



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**Chapter 3: The Relationship Between Exposure to Terrorism and
Employees' Behavior; Rumination as a Mediator and POS as a Moderator
(AOM Chicago, 2018)**

Objective

The purpose of the qualitative study (chapter 2) was to reach detailed insights on existing concepts. The study explored themes such as employees are suffering from rumination, facing organizational (in)justice, burnout, lower organizational commitment, and wellbeing issues because of discontinuous incidents. While in the same context employees need enhanced security and support from the organization. Hence, based on the results of (qualitative research, chapter 2), this study (chapter 3, AOM Chicago, 2018) tested terrorism stress, organizational support, organizational commitment, and rumination variables in the study context. Furthermore, qualitative study (chapter 2) helped to structure proper measures to carry on quantitative research on a larger scale.

Abstract: This study aims to investigate the impact of exposure to terror on employee organizational commitment working in terrorism induced areas through examining the role of rumination as a mediator and perceived organizational support (POS) as a moderator. We develop a model in which the mediating role of rumination in the exposure to terror relationship is conditional to the values of organizational commitment. Using a 268 sample size of questionnaire data from Pakistan collected during a period when terrorist attacks were at a peak – results from the hierarchical regression analyses provided support for our developed model. Overall, the statistical model is significant ($p < .05$); we found negative relationships between exposure to terror and organizational commitment (OC). We found that exposure to terror positively led to rumination which then negatively led to OC. We also found that POS significantly moderated exposure to terror and organizational commitment. This study revealed that exposure to terror is a deterring factor which changed employees' commitment. It further explained that organizations providing support to employees working in terrorist-ridden areas showed positive commitment. The paper discusses the theoretical and practical implications of these findings.

Keywords:

Exposure to terror, commitment, rumination, perceived organization support (POS)

Introduction

Terrorism is an international issue that crippled the peace of societies at large and businesses in particular. As an ally to the international community dedicated to the eradication of terrorism, Pakistan has lost many innocent lives. While the last decade was full of discontinuous incidents all over the country. In addition to this, the prevailing situation is risky, and it has prevented people to work and move freely in risky areas. The people working in areas that experienced more incidents face psychological pressure that pushed their concentration away from the workplace. A lack of attention is the prime reason for a reduced level of job commitment, high turnover, and lower performance.

Besides other key fronts, engaging employees at work, specifically in terrorism-stricken areas, is a crucial challenge for organizations. The employee's commitment in dangerous areas will be lower than in a peaceful environment (Reade & Lee, 2012). Terrorism ignites fear (Ben-Zur et al., 2012) which has a negative impact on the behavior of employees, women in particular (Bader & Berg, 2013; Bleich et al., 2003; Farooq Malik et al., 2014; Fischer Iii, 2002; Fischer et al., 2006; Howie, 2007). As a consequence, it affects their productivity (Boscarino et al., 2006) and severely hurt the businesses (Van Fleet & Van Fleet, 1998). Besides, terrorism creates trauma, depression, anxiety, and stress among a large number of people (Seeger et al., 2005).

Therefore, researchers are focusing more on the impact of terrorism on employee wellbeing and its implication toward organizations (Bader & Schuster, 2015; Czinkota et al., 2010a). However, the current documented knowledge on how employees, organizations, and societies are affected by terrorism is limited, and it needs a further in-depth and multi-dimensional study (Bader & Berg, 2013). To deduce in-depth and the logical conclusion we took

an approach (Qualitative study, Chapter 02) discussed above. In this regard, educational institutes staff were interviewed, to learn about their experiences of discontinuous incidents, resultant stress and its impact on their health and wellbeing. The qualitative study (Chapter 02) was helpful it named themes, on which we conducted other quantitative studies (03, 04 and 05 respectively) and proceed further.

Furthermore, despite being a victim of terrorist attacks, academia has neglected the indirect impact of terrorism on Human Resources in Pakistan. Hence, the present study is an attempt to fill this gap by studying businesses of Pakistan which are affected by terrorist attacks and operating in terrorism-ridden areas to see its indirect impact on employees' organizational commitment. This paper will empirically investigate the relationship between employees' behavior working in terror induced areas and their commitment to the organization. Educational institutes running in high-risk areas affected by terrorist incidences have been taken into account in this study.

Hence, the outline of this study starts with a basic introduction to the topic followed by a literature review on employees' psychological impact of terrorism. It will then continue by discussing employee organizational commitment during times of terrorist attacks which create fear among them. Research method and measurement scales used in this study are provided. Results, interpretation followed by discussion and conclusion are provided immediately after research methodology. Future research, some limitations are discussed finally.

3.1. Theoretical Background and Hypotheses

3.1.1. Psychological Impact of Exposure to Terrorism and Employee Behavior at Work

Terrorism incidents have spread worldwide after September 11, 2001. It implies that a large number of individuals, living in metropolitan, urban and rural (tribal) areas, are confronted with the danger of terrorist attacks in their workplace (Goodwin et al., 2005). Until now, research scholars have explored political, geographical aspects of terrorism and very few research papers focus on employees' behavior. This developing field draws attention to disaster research carried out by humans that eventually impact employees' psychological health and behavior at workplaces. Besides, there are natural and technological disasters which carry human responses (Lii, 2002). Research on this field demonstrates that a psychological response to natural disasters incorporates post-traumatic stress due to mass disasters which affect humans at large (Weisaeth, 1994). Furthermore, research related to natural disasters may not completely capture humans' reaction when it comes to terrorist acts, as these terrorist acts are planned, violent and terrifies people around the world (Breckenridge & Zimbardo, 2007). For instance, we have a recent bad incident that happened in Christchurch (15/03/2019, New Zealand), where terrorist(s) planned it for a long time, broadcast it on social media and terrifies the whole world.

Terrorist events are entirely human-made, with a preconceived fierce purpose, and these events impact humans in countless ways in their daily lives. These events produce longer effects which extend beyond the actual time and place where it was carried out, and this eventually leads to the long-term impacts on employees which affects their performance (Breckenridge & Zimbardo, 2007; Ryan et al., 2003). When it comes to comparing natural and terrorist disasters,

by difference natural catastrophes are entirely outside the ability of humankind to control while they can minimize its effects with good strategies. Technological disasters are ascribed to human mistake (Reade & Lee, 2012). Natural disasters may happen at any time, and they are not purposefully focused on any specific culture or territory. Technological accidents occur due to some unintentional mistake of humans which ultimately leads to catastrophe (Reade & Lee, 2012). In contrast, terrorists purposefully target social classes, specific business to destroy them. Additionally, they create fear among society and organizations which is more pervasive and tireless, contrasted with other types of disasters (Holloway & Fullerton, 1994).

Terrorist acts are deliberately intended to instigate terror, fear, and anxiety in civilians (Breckenridge & Zimbardo, 2007). These events affect society and businesses in various ways. On the one hand, terrorists target infrastructure so that civilians face problems in moving from one place to another. On the other hand, they kill civilians and harass business classes in a targeted way. They demand ransom for their captive employees which eventually increases fear among the employees and the business community (Bonger et al., 2007). These events demonstrate so many effects such as stress, tension, anxiety, depression, and insomnia and consequently, employees do not pay proper attention to their workplaces. These are the impacts of terrorist incidences reported by psychologists and clinical specialists (Schuster et al., 2001).

Terrorist incidences in general and suicide attacks in particular involve higher levels of stress to employees working in dangerous and terrorist hit areas (Bader & Berg, 2013; Hobfoll et al., 2007). Suicide events are thought to be more disturbing than other types of terrorist incidents since they create a more significant number of casualties and widespread sentiments of helplessness (Bader & Schuster, 2015). Moreover, people observe terrorist incidents directly or

through mass media communications, or relatives and companions, can encounter post-traumatic stress issues (Bar-Tal, 2007), it may lead to weaker health (Brandon & Silke, 2007).

3.1.2. Employee Attitude and Commitment

Research on psychological effects of terrorism in the workplace was mostly carried out after September 11, 2001, terrorist attacks in the USA (Alexander, 2004a; Mainiero & Gibson, 2003; Ryan et al., 2003). While minimal research is available from the perspective of developing countries, (Bader & Berg, 2013) almost all of the studies were carried out in the context of the United States and very few studies were carried out in other research contexts such as Afghanistan, Saudi Arabia and Sri Lanka (Bader, 2015; Reade & Lee, 2012). The scholars studied terrorism and its effects in the workplace in great depth in the United States. Mainiero and Gibson (2003) demonstrated employee feelings of separation with the organization and work during terrorist events in a specific way. They found employees closer and more attached to family and companions during terrorist events after 9/11. On the one hand, it was reported in the study; organizations were unable to provide required psychological support to all employees due to a lack of resources. On the other hand, employees became less concentrated in the workplace (Mainiero & Gibson, 2003). They were less motivated (Howie, 2007), had lower productivity (Alexander, 2004a), had lower job attachment but more attachment to the family and experienced increased job burnout (Hobfoll et al., 2007). Other studies have demonstrated higher absenteeism, job separation, and lower efficiency (Alexander, 2004a; Bader & Schuster, 2015; Reade, 2009).

Terrorist events create stress that also impacts employees' psychological position which eventually inhibits their natural leadership skills and job satisfaction, e.g. (Byron & Peterson,

2002). In some research, an increase in levels of anxiety, stress, uneasiness, and sorrow have been accounted (Alexander, 2004a), outrage and other negative feelings in times of emergency communicated by workers toward higher authorities for their non-supportive roles in the organization have also been experienced (Mainiero & Gibson, 2003). A study carried out by Ryan et al., (2003) on employee attitude before and after the 9/11 attacks in multinational corporations in the United States found negative perceptions about their higher authorities. It is the employees' anticipation where they assume that in times of emergency their organizations will not only act responsibly and pay compensation to the employees but also provide physical security, team support (Alexander, 2004a) and organize anti-stress programs (Bader & Berg, 2013) so that employees can better deal and avoid the aftershocks of terrorist incidents. In the same way, if the organization fails to provide anti-stress programs to employees after terrorist attacks, directors and organizational position are affected.

Considerable research has been carried out from political gains and a psychological perspective after 9/11 in the USA. Many research papers are also available related to terrorist events in the developing world especially from Pakistan about religious extremism and a political gains perspective. This research study is different in that we have investigated terrorist attacks from an employee work and commitment perspective. Terrorist attacks in Pakistan have shattered collective public peace directly and indirectly since the last two decades. Therefore, in this research work, many terrorist attacks all over Pakistan have been studied. In doing so, we develop an argument that terrorist assaults increase fear which decreases workers attachment, which in turn influences employee states of mind and attitude that will lead to a lower job commitment.

Hypothesis 1: Exposure to terrorism will be negatively related to organizational commitment.

3.1.3. Rumination as a Mediator between Terrorism and Organizational Commitment

Rumination is repetitive thinking about the causes, situational factors, and consequences of one's negative emotional experience (Nolen-Hoeksema, 1991). The terrorist attacks in metropolitan cities, industrial zones and in government setups are significant factors forcing depressive rumination in the minds of employees that are directly and indirectly affected, working or living in terrorist-ridden areas. In effect, the upsetting experience is a result of repetitive negative thinking in one direction. Traumatic life events give way to rumination, it prolongs depressed disposition (Luminet et al., 2000; Nolen-Hoeksema, 2000; Watkins & Moulds, 2007) and terror attacks are significant boosters of negative thinking.

Furthermore, exposure to terrorism has a relationship with rumination. It is pertinent to mention here that the qualitative study (Chapter 02) identified rumination theme as a significant variable and due to this employee are suffering psychologically. Rumination augments distress and leads towards depression (Nolan et al., 1998; Nolen-Hoeksema, 1991). Depressed people are least active, face concentration issues and end in lower organizational commitment. It affects emotional reactions which augment stressful events in life (Nolen-Hoeksema et al., 2008). Further, little is known about rumination in this process. Here we propose in the light of rumination literature that it may be used as a mediator through which exposure to terrorism leads to increased rumination which will further take a toll on organizational commitment. We expect that exposure to terrorism may forward to rumination and rumination to lower organizational

commitment. Finally, we hope rumination to mediate the association between exposure to terrorism and organizational commitment. In the light of the literature review above we hypothesize:

H2a: Exposure to terrorism will be positively related to increased rumination.

H2b: Rumination will be negatively related to decreased organizational commitment.

H2c: Rumination will mediate the relationship between exposure to terror and organizational commitment

3.1.4. Perceived Organizational Support as a Moderator between Exposure to Terrorism and Organizational Commitment

In the qualitative study (Chapter 02), employees described social support programs as an essential tool. Hence, due to the significance we added it to the analysis in the study. While, perception of exposure to terrorism may have an adverse impact on the employee; however, this perception may diminish by introducing various social support programs from organizations in particular and government in general. Social support programs may infuse and enhance one's capabilities to face adversities or minimize loss cycles (Hobfoll, 1988). The support is regarded as a significant factor because of its link to one's well-being (Hobfoll et al., 2007; Hobfoll & Lilly, 1993) which is related to positive feelings (Ruzek et al., 2006). Positive feelings gained from social support becomes a strong segment when dealing with harmful psychological damages that one experiences from a terrorist wave (Hobfoll et al., 2007; Ruzek et al., 2006). Social support programs at all levels increase the overall resource at the individual level, and it favorably impacts the organizational outcome (Baruch-Feldman et al., 2002; Uchino et al.,

2012). The discussion leads to the argument that the perception an individual gain from various support programs at the organizational level may impact employee organizational commitment. We expect that perceived organizational support may moderate employee exposure to terror and organizational commitment. Therefore, we hypothesize:

Hypothesis 3. Perceived organizational support will moderate the relationship between exposure to terror and organizational commitment, such that when exposure to terrorism is high, it will decrease organizational commitment and vice versa.

3.2. Methodology

Pakistan is the domain of study, a country that has faced 60,000 terrorism-related casualties (Global Terrorism Database, March 2017). According to the State Bank of Pakistan, extremist violence cost the country \$118.3 billion in direct and indirect losses from 2002 to 2016 (Pakistan, 2015). “Both economic growth and social sector development have been severely hampered by terrorism-related incidents”. We collected data from employees working in educational institutes at two large cities such as Quetta, and Peshawar which experienced most of the terrorist incidents. Both cities are the capitals of two provinces and the business hubs.

Invitations to the survey included a cover letter that indicated that participation was voluntary. Using a convenience sampling method, we took a research sample of educational institute employees from the mentioned cities. Scholars personally visited and distributed the survey questionnaires, written in the English language. The questions were asked to employees working at various levels. Respondents were also assured that their responses would remain confidential. Names of the respondents were erased during the data entry process to ensure

confidentiality of the respondents. In total 641 questionnaires were distributed at random, and we received a complete 268 responses i-e the response rate of approximately 42 percent (i-e 268/641). Each participant completed a survey that contained items related to a fear of terrorist attacks, rumination, POS and organizational commitment. Besides, each participant also provided his or her demographic details such as sex, age, marital status, duration of employment and highest qualification. In this research, we have examined employee fear of terrorist attacks taken as an independent variable, organizational commitment as a dependent variable, rumination as a mediator while perceived organizational support was used as a moderator in the study.

3.3. Scales and Measures

3.3.1. Fear of Terrorism (FOT)

Exposure to terrorism is the independent focal variable and measured using a 3-item scale, used in the studies of Gidron and Gal, (1999) and Silver et al., (2002). Response options used in this study ranged from (1) “strongly disagree” to (5) “strongly agree.”. The 3-items scale used in this study measured the degree to which an employee observed any course of fear or experience during working hours or in traveling time between offices. The sample items carried from the measurement scale comprised (i) fear of being exposed to terrorist attacks, (ii) fear for personal safety, and (iii) tension in crowded places.

3.3.2. Rumination

This is a mediating variable using Luminet, (2004); Retrospective Ruminations Questionnaire indexes rumination in response to an adverse life event. Response options used in

this study ranged from (1) “completely indistinct” to (5) “completely clear.”. This measurement scale measures rumination with items such as “Overall, to what extent did these ruminations captivate your attention? Overall, how often did these ruminations disrupt your working activities?”

3.3.3. Perceived Organizational Support (POS)

This is a moderator variable used in this study to measure the perceived organizational support for employees as a moderator in times of terrorist attacks. It measured employee’s perception regarding the firm care and support and appreciation of their valuable contribution for them. Response options used in this study ranged from (1) “strongly disagree” to (5) “strongly agree.” It is measured with four-items used in the studies of Eisenberger et al., (1990). The items are, “I feel respected by top management for my contributions to company success,” “I can expect to be recognized by top management when I make an outstanding contribution,” “My supervisor respects my contributions,” and “Top management trusts us to make the right decisions.”

3.3.4. Organizational Commitment (OC)

This is the primary dependent variable and measured using nine-items from organizational commitment, Cook and Wall, (1980). Response options used in this study ranged from (1) “strongly disagree” to (5) “strongly agree.”. Three main components of the OC measurement construct are 1) identification of employees with the organization, 2) a willingness of employees to invest their best effort in benefiting the organization, 3) and a desire to remain an excellent & dedicated member of the organization. These all three constructs are measured respectively with

three items. One of the sample items which carried from the respective measurement scale comprised “I am proud to be a member of this company,” and “I feel good when I know my own work has contributed to the good of the organization”).

3.4. Demographic Variables

Respondents were required to indicate their sex, age, education, marital status and prior experience of violence at the workplace during office hours. The sex of the respondents was categorized as (1) Male and (2) Female. Age groups were formed based on the mean score of the participants. A single item asked each respondent to report age using categories of (1) less than 25 years, (2) 26–35 years, (3) 36–45 years, (4) 46–55 years, (5) 56 and above. Education was formed using categories of (1) College-level studies, (2) Bachelor’s, (3) Masters and (4) Ph.D. Marital status categories formed using types (1) Single, (2) Married, (3) Divorced and (widowed). Finally, the experience was categorized as (1) 1–5 years, (2) 6–10 years, (3) 11–15 years, (4) 16–20 years, (5) 21>. All these variables are essential and used in various previous studies. We controlled for sex, age, education, marital status, and total experience as these might influence exposure to terror and organizational commitment relationship (Mathieu & Zajac, 1990; Steers, 1977).

3.5. Statistical Analysis

All variables were examined before the primary analysis – the normality of the entire data and detection of outliers were checked. This study has both moderator and mediation variables, and a hierarchal regression technique was applied. It is described in the literature review as exposure to terror influences employee behavior and organizational commitment. It is mediated

by rumination (indirect effect) and moderated on the condition of perceived organizational support. To examine the direct, indirect, and total effects for the sake of mediation variables effects, and moderator effect we used the macro described in Preacher & Hayes (2008). This procedure separately test the moderation and mediation hypotheses with 5000 bootstraps used in the case of mediator variable (rumination).

3.6. Descriptive Statistics

Of the 5 control variables, the two variables, i.e., employee sex showed the significant positive correlations with organizational commitment (OC) (.58**) and significant negative relation with fear of terrorism (FOT) (-.50**); whereas, employee age showed the significant negative correlation with organizational commitment (OC) (-.18**) and significant positive correlations with fear of terrorism (FOT) (.17**). To ensure that our hypothesized direct and indirect effects were not diluted by the inclusion of these significant contextual variables, we controlled for the effects of these two-demographic variables during the testing of the hypothesized relationships. A total of 268 complete questionnaires were collected. The results representing Mean, Std. Deviations and correlations of all variables including demographic variables are shown in Table 3.1. Out of total 268 questionnaires, 152 are reported males which comprised approximately 57% of the total sample, and the remaining 116 are reported females which contained about 43%.

Regarding the age group, 115 which is approximately 43% of the total sample are reported between the ages of 36-45 years. Moreover, 140 which is about 52% of the total sample reported single as marital status, 96 which is approximately 36% of the total sample had a working experience between 1-5 years and 114 which is about 42% of the total sample comprised a

Master degree as their highest level of education. Furthermore, correlation coefficients for all demographics as well as the main variables, i.e. fear of terrorism, rumination, perceived organizational support (POS), and organizational commitment (OC) are shown in table 3.1.

Table 3.1. Descriptive Statistics, Correlations, and Reliabilities

Variables	Mean	SD	1	2	3	4	5	6	7	8	9
1. Sex	1.43	0.49	-								
2. Age	3.04	0.86	.19**	-							
3.Total Experience	2.03	0.95	.017	-.001	-						
4. Education	2.13	0.44	.022	-.003	-.02	-					
5.Marital status	1.48	0.5	-0.05	-.007	-.026	-.104	-				
6.Organization Commitment	3.9	0.68	.58**	-.18**	.018	-0.02	-.047	(.82)			
7. Fear of Terrorism	2.06	0.92	.50**	.173**	-.05	.071	.21	-.76**	(.78)		
8. Rumination	2.76	1.18	-.094	-.99	.10	0.014	.132*	.267**	.342**	(.95)	
9. Org. Support	3.08	1.01	.43**	-.077	-.03	.014	-.047	.454**	-.37**	.02	(.84)

Note. Figures on main diagonal are Cronbach's alpha reliabilities. The mean and Std. Deviation was recorded. Sex: male=1, female=2; Age: 1=less than 25, 2=26–35, 3=36–45, 4=over 46-55, 5=56 and above; Experience: 1=1-5 years, 2=6–10 years, 3=11-15 years, 4=16-20 years, 5=21>; Education: 1=College level, 2=Bachelor's, 3=Masters, 4=M.Phil. & above; Marital status: Single=1, Married=2, Divorced=3, Widowed=4, **= $p < 0.01$ level, *= $p < 0.05$ level

3.7. Results

We began hypotheses testing with hypothesis 1 regarding the negative relationship between fear of terrorism (FOT) and organizational commitment (OC). The result of hierarchical multiple regression analyses, see table 3.2, showed that FOT has a significant negative relationship with OC (beta = $-.466$; $p < .001$). This result supported hypothesis 1 that, even after controlling for the effects of a demographic variable (*sex that is discussed more in following*),

FOT has a significant negative relationship with employees' organizational commitment. Hypothesis 2 (a) regarding the positive relationship between FOT & rumination was also supported, as FOT showed significant positive relationship with rumination after controlling for demographic variables ($\beta = .511$; $p < .001$). The hypothesis 2(b) regarding negative relationship between rumination & OC was also supported, as rumination showed a significant negative relationship with OC ($\beta = -.127$; $p < .001$). In general, all direct hypotheses after investigation were found to be significant ($p < .05$), see table 3.2.

While, in table 3.1 statistics; sex significantly correlated with Organizational Commitment. To check which sex; Male or female is more associated with organizational commitment, we applied independent t-test. We compared the mean of two independent samples (male and female). In the results, there was a significant difference in the score of male employees ($M = 3.56$, $SD = .71$) and female employees ($M = 4.34$, $SD = .23$) $t(266) = 11.39$, $p = .000$. Therefore, we conclude that the means for OC of the two groups (male and female) are significantly different. Particularly, our results suggest that fear of terror has more effect on organizational commitment of female employees' and suffer more than male employees working in terrorism-ridden areas.

Table 3.2. Summary of Direct, Moderating & Indirect Effects

	Rumination				Organizational commitment			
	<i>B</i>	<i>T</i>	<i>P</i>	<i>R</i> ²	<i>B</i>	<i>T</i>	<i>P</i>	<i>R</i> ²
<i>Direct Effects</i>								
<i>Sex</i>	0.27	1.63	0.10	0.16	0.34	5.60	0.00	0.62
<i>Age</i>	0.07	0.86	0.39		-0.02	-0.58	0.56	
Fear of Terrorism (FOT)	0.51	5.99	0.00		-0.47	-14.26	0.00	
Rumination					-0.13	-4.44	0.00	
<i>Moderating Effects</i>								
FoT*POS					-0.07	-1.98	0.05*	0.62
<i>Indirect Effects</i>								
FoT → Rumination → OC					-0.56	-18.99	0.00**	0.57

Note. Age: 1=less than 25, 2=26–35, 3=36–45, 4=over 46–55, 5=56 and above; Sex: male=1, female=2; Marital status: Single=1, Married=2, Divorced=3, Widowed=4; Employment duration: 1=1–5 years, 2=6–10 years, 3=11–15 years, 4=16–20 years, 5=21+; Education: Position: 1=College level, 2=Bachelor's, 3=Masters, 4=M.Phil. above; **=p<0.01 level, *=p<.05 level

Hypothesis 2(c) regarding the mediating effect of rumination between fear of terrorism (FOT) and organizational commitment (OC) was also supported by the data. The indirect effect of FOT, via rumination was significant on OC (beta = -.559; $p < .001$). The results of the mediation analysis supported the mediation character of rumination (see table 3.3).

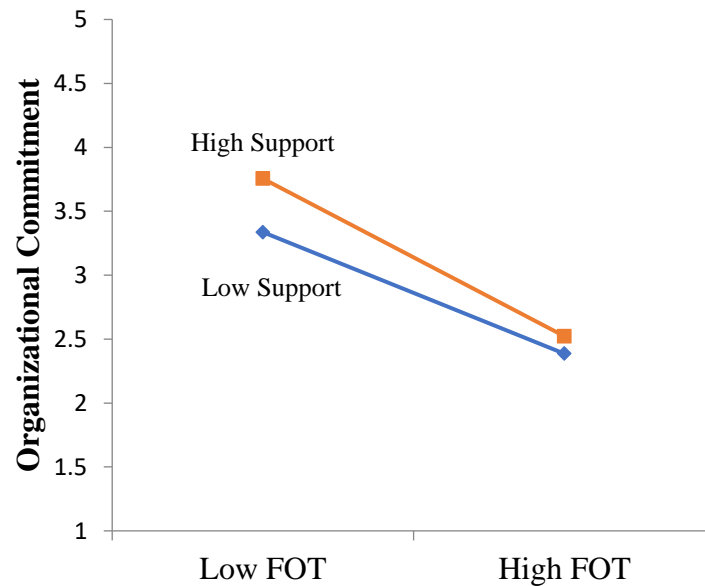
Table 3.3. Indirect effects of FOT on OC through Rumination

	B	SE	T	P
Total effect	-0.56	0.03	-18.99	0.00**
Direct effect	-0.56	0.04	-17.75	0.00**
Indirect effect	0.44	0.07	5.93	0.00**

Note: *** significant at 0.001 level; ** significant at .01 level N = 268

Hypothesis 3 regarding the moderating effect of the POS on the direct relationship between FOT and OC. It was also supported by the data as the interaction term (FOT*POS) showed a significant effect on OC (beta = -.070; $p < .05$) (see table 3.2). It meant that employees who record a lower score on POS are expected to undergo more suffering of a negative FOT impact on their commitment to the organization and vice versa. Moreover, to establish the direction of the supported moderating effect of POS, we probed the significant interaction effect in a graph (see figure 3.I). The graph depicted that the negative relationship between FOT and OC was better at the high-value of the moderator than that of the low-value of the moderator.

Figure 3.1. Moderating effect of Support on the direct relationship between Fear of Terrorism (FOT) and Organizational Commitment (OC)



The figure displays that a high level of POS is associated with a higher level of OC than a low level of POS, at the point where FOT is lowest. It shows that when the support from the organization to an employee is high in the wake of terrorist attacks, it will moderate but will not eliminate the adverse effects of terrorism fear. This concept showed that the POS buffering effect is partially limited in situations where chances of terror attacks are incredibly high. Explained differently, POS is more of a physical or psychological aid to employees, and it helps to buffer the adverse effects in the wake of terror attacks.

3.8. Discussion

The aim of this study was two-fold, i.e., understanding the relationship between fear of terrorism (FOT) and its possible effects on employee organizational commitment (OC). The

existing literature offers studies which discuss the fear of terror and its relationship with employee attitude (Hobfoll et al., 2007; Meisenhelder, 2002), but it lacks empirical evidence that discusses the indirect costs of fear of terror on employee organizational commitment. The research on exposure to terrorism concerning employee organizational commitment has mostly ignored in the past. Research findings in the present investigation suggest that working environments plagued by terrorism may have an indirect cost on the organization through decreased employee organizational commitment. More specifically, this research used rumination for extending scarce literature on the mediator between fear of terrorism (FOT) and organizational commitment (OC). Accordingly, we used the Stress framework (Lazarus & Folkman, 1987) and terror management framework (Greenberg et al., 1986) to explain *how* FOT, through the mediation of rumination and moderation of perceived organizational support (POS), leads to lowered organizational commitment. Our results provided support for those as mentioned above integrated theoretical frameworks and the hypothesized model. The broad significance of the study is that it addresses a gap where terrorist attacks are rampant and its indirect costs associated with the organization in terrorism-ridden areas. The research helps our understanding of how to motivate employees and increase their commitment when working, and how to manage employees in these risky areas that could decrease potentially undermining effects of the environment.

More specifically, confirmation of hypothesis 1 regarding the negative and significant relationship between exposure to terrorism and OC supported our argument that fear of terrorist attacks leads to a negative impact on employee's organizational commitment. It gives considerable support and further authorization to investigate the issue of terrorism and its effects on the external operating environment and employee organizational commitment. For instance,

terror management theory suggests that death-related stimuli increase fear, which in turn have adverse effects on human behaviors (Greenberg et al., 1986). Henceforth, terrorist activities are a significant risk to employees and organizations operating in terrorism-ridden areas (Bader, 2015). Consequently, regions characterized by terrorist conflict experience human, social and economic costs (Bader & Berg, 2013; Czinkota et al., 2010a).

Consistent with the literature, Reade & Lee (2012) also reported a significant negative relationship (-.13) with respect to ethno-political conflict and employees organizational commitment. In this study, we also have a negative correlation, and we compared the means of the male and female group. Notably, our findings suggest that female employees suffer more working in terrorism-ridden areas. Further, in a society where females face problems, almost every sector of life makes sense of negative association, and it aggravates the effect. Fear at workplace teach them more than they are helpless. These events throw them in rumination. Again, the discontinuous terrorist events let people think repetitively about negative consequences. On the same dimension, employees believe to be the next victim of such an incident. Generally, terrorism incidents leave an enduring influence on victims and sometimes also on the ones who barely escaped it. Wounds may not be visible over time, but they still suffer and their stress increases which result in a decline of their commitment toward organization and performance with time (Reade & Lee, 2012). Moreover, the study's findings give authorization to the effects of terrorist attacks on educational institutes in exposed areas which is a significant contribution in this research.

There was a confirmation of hypothesis 2 (a, b) regarding the significant direct relationship between FOT and increased rumination and as a significant negative relationship as a

consequence decreased OC. As our study is the first study in our knowledge which investigated these relationships, we do not have any prior similar empirical research that verifies the findings so that we can compare these findings. However, indirect support for these findings can be drawn from previous studies on psychology (Luminet, 2004; Spasojević & Alloy, 2001). For instance, rumination literature suggests that increased rumination in the wake of incidents play an essential role in developing negative relationships towards decreased organizational commitment. Hypothesis 2 (c) regarding the mediating effect of rumination between FOT and OC were also significant in the study. For instance, Abdel-Khalek and Lester (2006) found that rumination was found to be the best predictor of negative consequences about their life in both Kuwaiti and American samples. Taken together, findings of the cited studies provide excellent support for our supported hypothesis 2 (a, b) and 2 (c). Also, fear of terrorism induces to rumination, which ends in chaos by directing employees mind at the harmful effects of these incidents on self and associated lives. The fear and rumination shake employee commitment, and it grows further with an increase in the number of events at the workplace or in surrounding areas. Rumination destroys employees' abilities, and they lose commitment to the passage of time (Luminet et al., 2000).

Finally, confirmation of hypothesis 3, regarding a buffering and moderating effect of POS on the relationship between FOT and OC was also significant. Hypothesis 1, where we have a negative relationship between exposure to terrorism and OC, supports our argument and it leads to an adverse impact on employees' organizational commitment. It suggests that individuals, regardless of working in an organization, experience the same adverse effects because of terrorism. This finding can be interpreted as support for the existing literature on the psychological response to terrorism because it underscores the generalized nature of the human

reaction to terrorist attacks in the environment (Bonger et al., 2007; Jeff Greenberg et al., 1986; Schuster et al., 2001). Consistent with the literature, Reade & Lee (2012) also reported a significant relationship with respect to ethno-political context in Sri Lankan employees (beta=-.06, $p<.01$). The study found perceived organizational support (POS) moderated the relationship between exposure to terrorism and organizational commitment. Hence, POS is an aid to affected employees from their organization. We found that POS, is the support that employees receive from their superiors in the form of appreciation in their work, trust, and recognition does moderate the relationship between FOT and OC. With higher POS, the potentially detrimental effect of the external operating environment on commitment becomes weaker.

3.8.1. Study Implications

This study has made some crucial contributions to the existing literature on the effects of terrorism and organization studies. It is one of the few studies that investigated the cost of fear of terrorism with rumination as a mediator concerning organizational commitment for employees working in terrorism-ridden areas. This study examined the role of rumination and the role of POS as a moderating effect which suggested a significant relationship with organizational commitment. Very few studies are available which have hypothesized and tested such mediating and moderating effects.

Further, the role of rumination as a mediator tested empirically for the first time in the same context. The results of this study also suggest some important recommendations for managers operating in high-risk areas to accomplish maximum desired goals from the employees. They need to work closely with employees to boost their commitment, provide increased recognition, support and also organize anti-stress programs.

3.8.2. Study Limitations and Future Research Directions

This study has some limitations which may be used as an opportunity for future research. This research was done only in one country and data was collected from two cities where terrorism incidents were ongoing. It limits the generalizability to other research contexts; generalization must be treated with carefulness in this regard. Terrorist attacks in these two Pakistani cities are discontinuous, and many have occurred in the previous decade according to GTD 2015. We recommend that in future, qualitative studies or mixed methods should be used for a thorough understanding of these phenomena. Future studies might examine mechanisms that drive the terrorism–rumination relationship in more details in other contexts. Finally, the interesting finding of POS moderating relationship with a decreasing trend, we would suggest for future researchers to explore it theoretically and empirically.

In summary, this research reveals significant evidence on the effect of exposure to terrorism on organizational commitment using the role of rumination as a mediator and the part of perceived organizational support as a moderator. Although organizations have no potential capacity to stop terrorist incidences, its effects can be minimized through better policies. Those policies are likely to decrease the adverse effects of exposure to terror and enhance employee organizational commitment.

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Chapter 4: Relationship Between Job stress and Burnout: Examining the Role of Organizational Justice and the Role of Sensitivity to Terrorism in Terrorism-Ridden Areas (EGOS, 2019)

Objective

The next stage after investigating terrorism stress and its impact on employee's organizational commitment (Chapter 3, AOM proceedings paper) was to analyze job stress in the similar context. The rationale of this study was to investigate effects of job stress on employee behavior at a larger scale in the same contexts. As mentioned above in the qualitative study; results identified themes such as employees are suffering from mismatch between effort-reward ratio, experiencing in-justice practices and facing health and wellbeing problems because of discontinuous incidents. Hence, based on the results of (Qualitative research, Chapter 2 and Quantitative research, Chapter 3), this study (Chapter 4, EGOS, 2019) tested effort-reward imbalance framework, along with organizational in-justice and three facets of burnout variables in the study context.

Abstract: The article examines the relationships of effort-reward imbalance (ERI) on employee stress, three facets of job burnout (BO), organizational (in)justice (OJ) and sensitivity to terrorism (STT). This study uses the effort-reward imbalance (ERI) framework as a job stress model. It contributes to the association of effort-reward imbalance of workers to facets of job burnout, sensitivity to terrorism to facets of job burnout and organizational (in)justice to facets of burnout in terrorism-ridden areas. After describing terrorism and a brief discussion on organizational justice and some of the challenges associated with it, we introduced ‘sensitivity to terrorism’ as a moderator in the effort-reward imbalance framework. Using a 432 sample size of questionnaire data collected from two big cities where terrorist attacks are discontinuous and received during a period when terrorist attacks were at a peak. The online data collection method was used for the study due to safety reasons. We have interesting results after analyzing data in EFA, results from the hierarchical regression analysis provided support for our developed model. Overall, the statistical model is significant ($p < .05$). We found significant relationships between effort-reward imbalance and facets of job burnout. Organizational (in)justice mediated the influence of ERI on facets of BO. We also found that sensitivity to terror (STT) significantly moderated ERI and facets of burnout. The article concludes with some implications and guidelines for future research.

Keywords: Effort, reward, effort-reward imbalance (ERI), organizational justice (OJ), sensitivity to terrorism (STT), burnout (BO)

Introduction

Job stress has received greater attention in academia and in social circles both in the past and recent times due to its adverse effects on health (Fischer et al., 2006; Marmot, 2015). Stress at work is increasing due to various external factors such as changes in political setups (Labrague et al., 2017), advancement in technology (Bliese et al., 2017; Carnall, 2018), changes in the economy (De Jonge & Dormann, 2017) and so on so forth. Stress has become a significant problem because of changes in job demands, and person-resources or mismatch between the two. Hence, above factors are creating adverse effects on health (Harlow & Lawler, 2018). The adverse health effects are the result of a complex operating work environment and job demands, arising from the environmental situation that does not match with capabilities or resources of the employees (Beehr, 2014; Cooper & Kelly, 1993; Dollard et al., 2003; Hobfoll et al., 2007; Karasek, 1998). The characteristics of a complex operating environment are comprehensive. However, the prevalence of terrorism receives special attention in business setups in terrorism-ridden areas (Czinkota et al., 2010b).

Terrorism is an international issue that crippled the peace of societies at large and businesses in particular. The people working in areas that experience terrorist events face health problems that pushed their concentration away from the workplace (Hobfoll et al., 2007). A lack of concentration is the prime reason for a reduced level of job commitment, turnover intentions, and lower performance. (Bader & Berg, 2013; Reade & Lee, 2012). Besides other key fronts, engaging employees at work, specifically in terrorism-stricken areas, is a key challenge for organizations. According to the US State Department, terrorism is ‘premeditated, politically

motivated violence perpetrated against noncombatant targets by subnational groups or clandestine agents' (22 U.S.C. § 2656f).

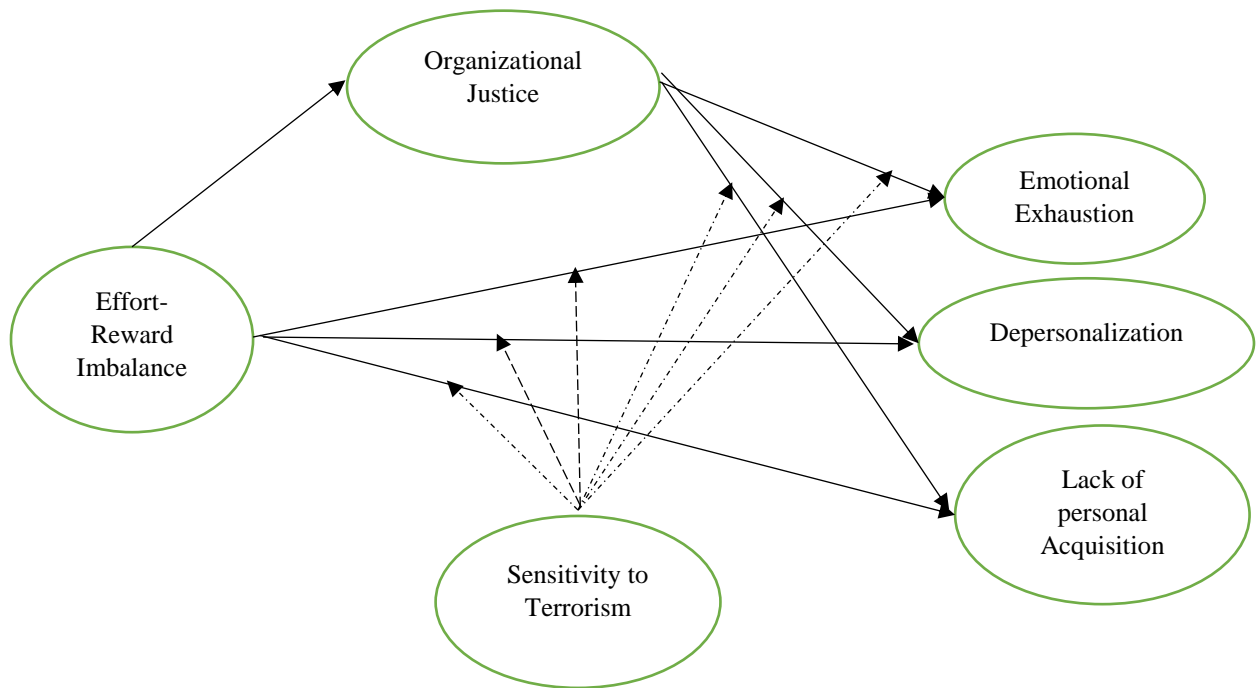
Working in situation triggered by fear have a negative impact on employees attitude and behavior (Bader & Berg, 2013; Farooq Malik et al., 2014), and this, in turn, affects employee performance and organization's productivity (Boscarino et al., 2006; Fischer et al., 2006). Additionally, among certain risk factors, fosters the space of uncertainty which affects employees and is considered as one of a main determinant of stress (Brandon & Silke, 2007). Uncertain factors are believed to be the fundamental determinant of occupational stress for employees working in dangerous areas (Bader & Berg, 2014; Reade, 2009). Moreover, employment in these areas is often physically and emotionally demanding when one compares the priceless value of life with rewards, such as compensation, fringe benefits, job security, personal accomplishment and overall satisfaction that lead to job stress. Therefore, employees are often reluctant to work in uncertain areas due to threats and fear associated with it (Bader et al., 2015).

Much less explored on the relationship between employee job stress working in terrorism-ridden areas. In this context, what employee would consider working in and how its effects are? This suggests that there is still a growing demand to explore the various effects of discontinuous incidents on employees working and organizations operating in risky areas. Little research is investigated on the impact of terrorism on employee wellbeing, the process involved and coping that may lessen effects. Hence, this study will use the effort-reward imbalance (ERI) framework to empirically tests it in terrorism-ridden settings. Given the need for more research examining effort-reward and burnout facets, this research study takes a more focused view in terms of risk

that arises from terrorism incidents around the workplace. Figure 4.1 shows the theoretical framework of this study.

Therefore, this study, first, set out to analyze evidence based on the effort-reward imbalance (ERI) framework concerning employee burnout at work. The objective of the study would be like this, firstly, we describe ERI framework that provides a valuable approach to study the toxic element of the working environment in the terrorism-ridden areas. Secondly, we suggest that organizational justice, characterized as the organization's behavior and the employee's resulting behavior, for example, employers makes redundant half of the workers, an employee may feel a sense of injustice with a consequent change in output and may increase employee burnout. In particular, when environmental uncertainty increases and effort-reward redundancy is high, employees are more likely to have negative wellbeing and have symptoms of exhaustion.

Contrary to this working in terror-ridden areas, fair treatment among all employees make working more effective (Elovainio et al., 2005; Van den Bos et al., 1998). We propose that the fair organizational justice process make employees more prone to work and less burnout at work. Finally, as the effects above are expected to develop, we study a large sample of two cities in Pakistan (where terrorist incidents frequently occurred in the past). Based on this motivation, this study brings about and contributes to the existing literature on ERI by furnishing conceptual relationships supporting the extent to which employee strain, as operationalized by the ERI framework, results in actual changes in the well-being of employees.

Figure 4.1. The Research Framework

4.1. Literature Review and Formation of Hypotheses

In this study, we used the effort-reward imbalance (ERI) framework. The main feature included in the framework corresponds to the critical psychological risk factors and stress-related illness because of inequality in efforts and rewards. It emphasizes the notion of reciprocity at work (Siegrist, 2002). It has identified in previous research that stress is associated with burnout, disability, and negative emotions because of violations in the principle of reciprocity, e.g., (De Lange et al., 2005; Montano et al., 2016).

In connection with point previously mentioned work stress arise from disbalance, provides a valuable approach in investigating the risk element of the working environment. For this reason, terrorism is a potential cause of environmental risk element; it has a considerable impact

on the organization's and employees' wellbeing (Elfering et al., 2005). Therefore, many of the basic functions of the organization operating in terrorism-ridden areas have changed (Fee et al., 2017). Increased direct and indirect incidents near and around workplaces have created hazardous work-life complications, affecting the organization's performance as well as employees' wellbeing (Bader & Berg, 2014; Canetti-Nisim et al., 2009; Farooq Malik et al., 2014).

4.1.1. Effort-Reward Imbalance Framework (ERI)

Siegrist (2002) uses the ERI framework to refer to the mismatch between effort-reward imbalance and the resulting stress at work. In their research, the word 'effort' is used in its broadest sense to refer to all efforts the employee made while the term 'reward' is used to describe all rewards received in exchange of their efforts. The core of the trade is based upon appropriate return expectancy reflected in efforts being compensated with proper rewards. To put it differently, the ERI model indeed affirms that work described by both high efforts and low rewards, in general, correspond to a shortfall between "cost" and "gains." Then, the imbalance between high efforts spent and low rewards received is likely to have negative wellbeing which increases stress (De Jonge et al., 2008; Van Vegchel et al., 2005).

On the other hand, a balance between effort spent and reward received is likely to promote well-being and high health (Montano et al., 2016). The disequilibrium may cause a condition of emotional distress, which can prompt strain responses. As a result, the primary assumption of the ERI framework is that where an unequal relationship exists between the employee perceptions of effort and reward in the work environment, consequently work strain will result (De Lange et al., 2005; Siegrist et al., 2004). Siegrist (2002) emphasizes a balanced ratio between effort and

rewards in the prediction of employee well-being. In previous research, various aspects of work stress due to an imbalance between effort and reward have been investigated for an overview (Hämmig et al., 2012), absenteeism (Allisey et al., 2016), and exhaustion (Montano et al., 2016). In summary, these research studies conclude that there is a significant relationship between stress with decreased employee wellbeing.

4.1.2. Job Burnout

Maslach (1981) referred burnout as an outcome of job stress. It is long-lasting stress at work, as a result of prolonged involvement and association with unfavorable and emotionally worrying working conditions (Ahola et al., 2009; Klein et al., 2010). Similarly, it results from excessive demands at work, for instance, mental distress, sleeplessness, anger, repetitive thinking, and headaches (Leiter & Maslach, 2008). To demonstrate, some researchers have analyzed burnout in other frameworks such as psychological syndrome with distinct signs such as insomnia and exhaustion (Maslach & Leiter, 2017; Melamed et al., 2006). While, others have characterized it primarily by emotional exhaustion and fatigue (Kristensen et al., 2005). Besides, the scholars explained burnout as a three-dimensional variable namely emotional exhaustion, depersonalization, and lack of personal accomplishment. The emotional exhaustion refers to the feeling of extreme physical or mental tiredness to cope with work pressures (Maslach & Leiter, 2017). Depersonalization refers to the employees who show impersonal reactions to their colleagues at workplaces and the lack of personal accomplishment relates to employees who feel that they have little or no feeling about their achievement at work (Maslach & Leiter, 2017). Moreover, the employees suffer from burnout can experience one dimension of burnout, two or a combination of all three aspects.

To demonstrate its effects, research scholars applied ERI framework with burnout at the workplace in great depth (Klein et al., 2010; Schaufeli & Greenglass, 2001; Siegrist, Klein, & Voigt, 1997). As a consequence due to an imbalance, employees experiences increased job burnout at workplace (Leiter & Maslach, 2008; Schaufeli & Greenglass, 2001). Under those circumstances, an employee also paid less attention at work (Montano et al., 2016), employers recorded increased absenteeism, turnover (Van Vegchel et al., 2005), and lower performance (Baruch-Feldman et al., 2002). Also, the loss of feelings about co-workers increased physical or mental tiredness, dissatisfaction with self-fulfillment and growth towards work are some of the indicators of the burnout in an individual (Leiter & Maslach, 2008; Schaufeli & Bakker, 2004).

Considering the previous, the ERI framework with burnout provides a valuable approach to study the toxic element (terrorism) of the working environment. It suggests that high efforts and low rewards imbalance may have enduring effects, consequently resulting in a gradual depletion of individuals' emotional resources, wellbeing and so on so forth (Kivimäki & Siegrist, 2016; Peter et al., 1998). Extant literature provides evidence that an individual who is working in dangerous areas undergoes gradual resource exhaustion and may develop depersonalization (Melamed et al., 2006; Shirom, 2003). In this research study, we focused on facets of job burnout (Maslach Burnout Inventory (MBI) as dependent variables. We focused on facets of burnout because of its significance in the prior literature at work, it is associated with adverse wellbeing outcome (Anthony-McMann et al., 2017; Leiter & Maslach, 2008; Schaufeli & Greenglass, 2001). Moreover, it is widely used in human service professions especially in an occupational context. Thus, it is hypothesized;

Hypothesis 1(a); High efforts and low rewards at work environments in terrorism ridden areas will be significantly associated with emotional exhaustion.

Hypothesis 1(b); High efforts and low rewards at work environments in terrorism ridden areas will be significantly associated with depersonalization.

Hypothesis 1(c); High efforts and low rewards at work environments in terrorism ridden areas will be significantly associated with lack of personal accomplishment.

4.1.3. Role of Organizational Injustice as a Mediator

Research has suggested that the ERI and burnout relationship is mediated by organizational injustice (Elovainio et al., 2005). As a matter of fact, unbalanced exchanges in toxic context between efforts and rewards makes the work more unpredictable, and under those circumstances, it emphasizes the adequacy of the effort-reward ratio (Elovainio et al., 2005; Van den Bos & Lind, 2002). In fact, when environmental uncertainty increases and effort-reward imbalance is high, employees are more likely to have lowered wellbeing and have symptoms of burnout. Hence, when organizational injustice stays, and terror incidents are at an elevated level, one's desire is to keep alive with all one's resources. It must be remembered that it is the time that likely to causes stress (Canetti-Nisim et al., 2009; Hobfoll et al., 2007).

Contrary to this fair treatment among all employees in risky areas, makes working more effective, enhancing the wellbeing among them (Elovainio et al., 2005; Van den Bos & Lind, 2002). The relationship between organizational injustice and burnout reinforces the notion of fair justice explicitly making employees more prone to work and less burnout at work. As an illustration, organizational justice will increase the balance between effort-reward by all means

having lesser burnout at work. Thus, in this research, organizational justice is predicted to play a mediating role in the relationships between ERI and burnout. Therefore, it is hypothesized;

H 2(a): Organizational justice will significantly mediate the relationship between effort-reward imbalance and emotional exhaustion relationship.

H 2(b): Organizational justice will significantly mediate the relationship between effort-reward and depersonalization relationship

H 2(c): Organizational justice will significantly mediate the relationship between effort-reward and lack of personal accomplishment relationship.

4.1.4. Role of Sensitivity to Terrorism (STT) as a Moderator

Terror management theory (TMT) posits that in general terrorism incidents cause stress and death related consequences, in particular, have mixed feelings of vulnerability (Greenberg et al., 1986). It predicts an indirect effect on several organizational measures and employee wellbeing (Greenberg & Babcock-Dunning, 2012). In the workplace environment, where incidents are apparent, it increase not only fear but also health and wellbeing issues for employees (Burke & Cooper, 2008; Greenberg et al., 1986). So, some individuals may tend to be more sensitive and affected by potential dangerous incidents while others may show a less sensitive reaction towards the situation (Lazarus, 1995).

The sensitivity to terrorism may have various consequences on the impact of specific predictors on their (work) attitudes. Like so many stressful factors are involved in exposure to terroristic situations, and these are the leading causes of strain for employees. Indirect effects of

terrorism, such as emotional harm, depersonalization, and lack of personal accomplishment are widespread causing wellbeing (Burke & Mikkelsen, 2006; Czinkota et al., 2010b; Schaufeli, et al., 2017). For instance, Bader (2015) analyzed indirect effects of sensitivity to terrorism between social exchange factors and various employees' work attitudes. He found that organizations should take into consideration sensitivity to terrorism for corporate measures and uplift better work attitudes. In his research, sensitivity to terrorism is negatively related to work attitude. Specifically, it is anticipated that individuals who are more prone to be emotional (i.e., have a higher sensitivity) will react more strongly to the organization's set of measures and vice versa.

Moreover, sensitivity to terror moderates the relationship between organizational injustice and facets of burnout. In the sense that higher benefits should be associated with a lower job burnout in study context. The reason behind this is when employees are in trouble then they expect reasonable effort-reward allowance from the employers. They also hope employers not only support them but also provide guarded security, when threats are outward. Therefore, in this study sensitivity to terrorism is predicted to moderate between the direct relationship of ERI–burnout and organizational injustice-burnout relationships.

With this in mind and in the light of previous literature, we suggest that sensitivity to terrorism has a relationship with emotional exhaustion, depersonalization and lack of personal accomplishment. For instance, high rewards and security included with employee compensation package would typically lead to lower job burnout depending on the sensitivity to terrorism. Thus, it is proposed:

Hypothesis 3(a); Sensitivity to terrorism will moderate the relationship between effort-reward imbalance and emotional exhaustion.

Hypothesis 3(b); Sensitivity to terrorism will moderate the relationship between effort-reward imbalance ratio and depersonalization.

Hypothesis 3(c); Sensitivity to terrorism will moderate the relationship between effort-reward imbalance ratio and lack of personal accomplishment.

Hypothesis 4(a); Sensitivity to terrorism will moderate the relationship between organizational injustice and emotional exhaustion.

Hypothesis 4(b); Sensitivity to terrorism will moderate the relationship between organizational injustice ratio and depersonalization.

Hypothesis 4(c); Sensitivity to terrorism will moderate the relationship between organizational injustice and lack of personal accomplishment.

4.2. Methodology

The study is measuring the effects of predictors and comprises data from risky areas of Pakistan. For this study we used non-probability purposive sampling method. It helped to collect enough data from the organizations and employees to fulfill the objectives of the study. We collected data from employees working in educational institutes at two different cities such as Quetta and Peshawar, which experienced some of the massive terrorist incidents. Therefore, the selection of the Pakistani cities is based on the employees working and organizations business in these two cities and no of terrorist attacks.

The survey questionnaires were written in the English language. In total 950 questionnaires were distributed, and we received a complete 432 responses i-e the response rate of 45 percent (i-e 432/950). Each participant completed a survey that had items related to effort-reward imbalance, organizational justice, sensitivity to terrorism, emotional exhaustion, depersonalization, and lack of personal accomplishment. Besides, each participant also provided demographic details such as sex, age, education and total employment period. We examined effort-reward imbalance as an independent variable, organizational justice as a mediator, burnout as a dependent variable, while sensitivity to terror used as a moderator in the study.

4.3. Scales and Measures

4.3.1. Effort-Reward Imbalance

A 23 scale items measured effort-reward framework, it deal with three major components of ERI: effort, reward, and over-commitment (Siegrist et al., 1997). A 6 item measures Effort component, that are summed to create cumulative score ranging from 6 to 30 with a high score reflecting high effort. A 11 questions measures Reward component. It has further three parts namely; monetary fulfillment, status control, and esteem reward. Items are summed to create cumulative scores ranging from 11 to 55. In this research, we have particularly used effort and reward components of ERI framework. The items were measured using a five-point Likert scale.

4.3.2. Organizational In-Justice

A 6-item measured the perceived overall justice questionnaire, it is based on the work of (Lind, 2001) and (Colquitt & Shaw, 2005). The respondents asked questionnaire measuring Overall Justice (OJ) scale to assess personal justice experience and general fairness of the

organization. The three items evaluated as employees' personal justice experiences; "Overall, I'm treated fairly by my organization"; "In general, I can count on this organization to be fair"; "In general, the treatment I receive around here is fair". The remaining three items assessed the fairness of the organization generally; "Usually, the way things work in this organization are not fair"; "For the most part, this organization treat its employees fairly"; "Most of the people who work here would say they are often treated unfairly." The items measured using a five-point Likert scale.

4.3.3. Sensitivity to Terrorism (STT)

A 3-item scale measured sensitivity to terrorism with little modification; it is based on the work of (Reade, 2009). The respondents were asked to indicate how much stress they associate with terrorist attacks, or if they feel more stressed at work after a terror incident. The three items assessed as employees came across/heard news of any terrorist incident "I seem to lose enthusiasm for work whenever I get news of terrorist incident", "I feel tenser at work when there is a fresh incident" and "I sometimes miss work or find it difficult to perform my job well due to the mood created by the terrorist incident" The items were measured using a five-point Likert scale.

4.3.4. The Maslach Burnout Inventory (MBI)

The inventory questionnaire was developed by Maslach and Jackson (1981). It measures the three burnout components i.e. emotional exhaustion (e.g. 'I feel like I am at the end of my rope'), depersonalization (e.g. 'I've become more callous towards co-workers' lives through my work') and lack of personal accomplishment. Using a 5-point Likert scale, respondents showed

the percentage of their reactions to which each statement is like or unlike to their condition at work. The items were measured using a five-point Likert scale.

4.4. Demographic variables

Respondents asked to mention sex, age, education, and work experiences during office hours. The sex categorized as (1) Male and (2) Female. Age groups computed on the mean score using categories of (1) less than 25 years, (2) 26–34 years, (3) 35–44 years, (4) 45–54 years, (5) 55 and above. Education categories as (1) College-level, (2) Bachelor's, (3) Masters and (4) M.Phil./M.S. Finally, experience categorized as (1) 1–5 years, (2) 6–10 years, (3) 11–15 years, (4) 16–20 years, (5) 21>. We controlled for sex, age, education, and total experience as these might influence effort-reward imbalance and facets of burnout relationship.

4.5. Analysis and Results

All variables examined before the primary analysis – the normality of the entire data and detection of outliers, all checked before moving to analysis. This study holds both moderator and mediator variables. To examine the direct, indirect, and total effects, we used the version of the Process macro described in Preacher & Hayes (2004). The procedures separately test the moderation and mediation hypotheses with 5000 bootstraps used in the case of the mediator variable.

4.5.1. Factor Analysis

Before hypotheses testing, we examined factor analysis to confirm the generalizability and adequacy of selected variables in the research context. The value of the KMO is 0.91 and

Bartlett's test of sphericity is significant ($p < 0.001$). Both indicate that the set of variables are adequately related to analysis. The analysis extracted seven factors based on the eigenvalue greater than 1 explaining 67.84 percent of the variance for the complete set of variables. Factor 1 formed of 8 items reported on a 5-point Likert scale that explained 25.13 percent of the variance with factor loadings from .825 to .906. Factor 2 consist of 11 items that explained 14.88 percent of the variance with factor loadings from .644 to .822. Factor 3 comprised of 7 items that explained 8.70 percent of the variance with factor loadings from .716 to .858. Factor 4 consist of 7 items that explained 6.74 percent of the variance with factor loadings from .602 to .863. Factor 5 comprised of 6 items that explained 5.3 percent of the variance with factor loadings from .750 to .868. Factor 6 consist of 6 items that explained 4.16 percent of the variance with factor loadings from .362 to .890. Factor 7 consist of 3 items that explained 2.98 percent of the variance with factor loadings from .734 to .775. The whole analysis means that we have found seven clear patterns among respondents, and all are independent of one another (please see table 4.1).

Table 4.1. Pattern Matrix

Items	Personal acquisition	Reward	Emotional Exhaustion	Depersonalization	Org. Justice	Effort	Situation to Terror
EF1						0.362	
EF2						0.755	
EF3						0.89	
EF4						0.792	
EF5						0.429	
EF6						0.454	
RW1		0.692					
RW2		0.774					
RW3		0.789					
RW4		0.739					
RW5		0.75					
RW6		0.75					
RW7		0.644					
RW8		0.67					
RW9		0.79					
RW10		0.669					
RW11		0.822					
OJ1					0.833		
OJ2					0.849		
OJ3					0.868		
OJ4					0.785		
OJ5					0.75		
OJ6					0.821		
ST1							0.734
ST2							0.775
ST3							0.738
ME1			0.755				
ME2			0.818				
ME3			0.835				
ME4			0.757				
ME5			0.716				
ME6			0.84				
ME7			0.858				
MD1				0.849			
MD2				0.863			
MD3				0.829			
MD4				0.602			
MD5				0.731			
MD6				0.843			
MD7				0.638			
MP1	0.895						
MP2	0.847						
MP3	0.847						
MP4	0.843						
MP5	0.825						
MP6	0.887						
MP7	0.906						
MP8	0.876						

Extraction Method: Maximum Likelihood.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

4.5.2. Descriptive Statistics

We controlled for the effects of demographic variables during the testing of the hypothesized relationships. A total of 432 complete questionnaires received for the analysis. The results are standing for Mean, Std. Deviations and correlations of variables shown in Table 5.2. Out of total 432 questionnaires, 247 are reported males which formed 57% of the total sample, the remaining 185 are reported females which formed 43%. Regarding the age group, 138 which is 32% of the total sample are reported between the ages of 35-44 years. Further, 138 which is approximately 32% of the total sample had a working experience between 5-10 years and 355 which is about 82% of the total sample comprised a Master degree as their highest level of education. Table 4.2 describes, means, standard deviations, intercorrelations among constructs and the reliabilities on the diagonal.

Table 4. 2. Mean, Standard Deviations, Correlations and Reliabilities

	Mean	S.D	1	2	3	4	5	6	7	8	9	10	11
1. Sex	1.33	0.47	-										
2. Age	2.72	1.13	-.21*	-									
3. Education	2.22	0.49	.02	-.09*	-								
4. Total Exp.	2.37	1.14	-.08	.09*	.08	-							
5. Effort	3.29	0.78	.09*	-.15**	.109*	.12*	(.81)						
6. Reward	3.41	0.77	.08	-.18**	.107*	.09	.43**	(.92)					
7. Org. Justice	3.27	1.16	.13**	-.20**	.135**	.25*	.39**	.32**	(.93)				
8. Situation to terrorism	3.46	0.87	.06	-.10*	.103*	.18**	.25**	.28**	.35**	(.79)			
9. Emotional Exhaustion	2.51	0.95	.01	-0.1	.05	.04	.12**	.09	.40**	.09	(.92)		
10. Depersonalization	2.59	0.96	-.01	-.06	-.01	.00	.09	.11*	.33**	-.01	.43**	(.91)	
11. Lack of acquisition	2.56	1.13	-.02	-.06	-.01	.12*	.09	.08	.49**	.04	.297**	.32**	(.96)

Note. Figures on main diagonal are Cronbach's alpha reliabilities. The mean and Std. Deviation recorded. Sex: male=1, female=2; Age: 1=less

than 25, 2=26–35, 3=36–45, 4=over 46–55, 5=56 and above; Experience: 1=1–5 years, 2=6–10 years, 3=11–15 years, 4=16–20 years, 5=21>;

Education: 1=College level, 2=Bachelor's, 3=Masters, 4=M.Phil; **=p<0.01 level, *=p<.05 level

4.6. Hypotheses Testing

4.6.1. Direct Effects

We began hypotheses testing with hypothesis 1 of the significant relationship between efforts-reward imbalance (ERI) and employee emotional exhaustion (EE) working in terrorism-ridden areas. The result of hierarchical multiple regression analyses, see table 5.3, showed that ERI has a significant relationship with EE (beta = .15; $p < .001$). This result supported hypothesis 1. Hypothesis 2 describes the significant relationship between ERI and depersonalization (DP). The result of regression analyses, see table 4.3, showed that ERI has a

significant relationship with DP ($\beta = .11$; $p < .05$). Hypothesis 2 was supported. Hypothesis 3 is about a significant relationship between ERI and personal accomplishment (PA). The result of hierarchical multiple regression analyses, see table 4.3, showed that ERI has a significant relationship with PA ($\beta = .13$; $p < .05$). This result supported hypothesis 3.

We also analyzed direct relationship between organization justice (OJ) and emotional exhaustion (EE), depersonalization (DP) and personal accomplishment (PA). In general, all direct hypotheses after investigation found to be significant between OJ and EE ($\beta = .33$; $p < .05^{**}$), between OJ and DP ($\beta = .27$; $p < .05^{**}$), between OJ and PA ($\beta = .48$; $p < .05^{**}$) (see table 4.3).

Table 4.3. Summary of Direct Effects

	Organizational Justice				Emotional Exhaustion				Depersonalization				Lack of acquisition			
	<i>B</i>	<i>T</i>	<i>P</i>	<i>R</i> ²	<i>B</i>	<i>T</i>	<i>P</i>	<i>R</i> ²	<i>B</i>	<i>t</i>	<i>P</i>	<i>R</i> ²	<i>B</i>	<i>t</i>	<i>P</i>	<i>R</i> ²
ERI	0.59	8.85	0.00**	0.16	0.15	2.61	0.00**	0.16	0.11	1.83	0.06*	0.08	0.13	1.84	0.05*	0.09
OJ					0.33	9.16	0.00**	0.17	0.27	7.32	0.00**	0.11	0.48	11.80	0.00**	0.24

**= $p < 0.01$ level, *= $p < 0.05$ level

4.6.2. Indirect Effects

The data supported hypothesis 2(a) regarding the mediating effect of organizational justice (OJ) between ERI and emotional exhaustion (EE). The indirect effect of ERI, via OJ was significant on EE ($\beta = 0.589$; $p < .001$). The results of mediation used Preacher & Hayes (2004) bootstrapping method, confirmed that OJ mediates the relationship between ERI and EE.

The data supported hypothesis 2(b) regarding the mediating effect of OJ between ERI and DP. The indirect effect of ERI, via OJ was significant on DP (beta = 0.561; $p < .001$). The data supported hypothesis 2(c) regarding the mediating effect of organizational justice (OJ) between ERI and PA. The indirect effect of ERI, via OJ was significant on EE (beta = 0.591; $p < .001$). In other word, effort-reward has a significant direct effect as well as a significant indirect effect on EE, DP, and PA. The results of the mediation analysis supported the mediation character of organizational justice (see table 4.4).

Table 4.4. Summary of Indirect Effects

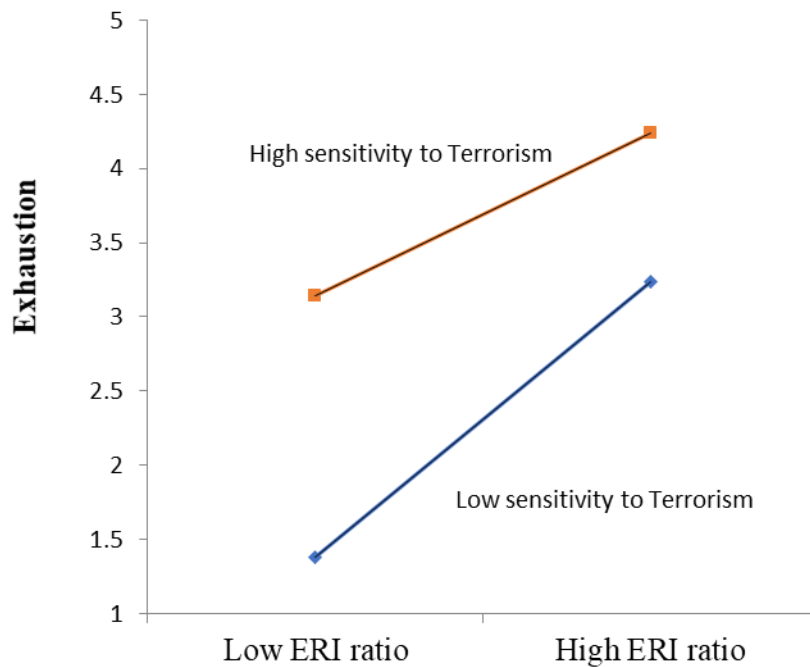
	<i>B</i>	<i>T</i>	<i>P</i>	<i>R</i> ²
ERI→OJ→EE	0.589	8.85	0.00***	0.16
ERI→OJ→DP	0.561	8.65	0.00**	0.15
ERI→OJ→PA	0.591	8.95	0.00**	0.17

**= $p < 0.01$ level, *= $p < .05$ level

4.6.3. Interaction Effects

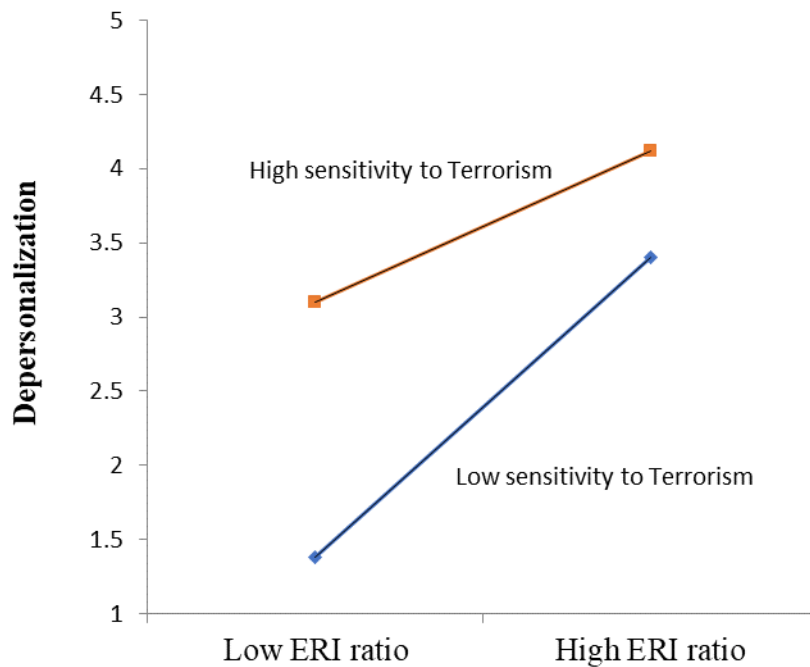
Hypothesis 3 (a) regarding the moderating effect of the sensitivity to terror (STT) on the direct relationship between effort-reward imbalance ratio (ERI) and emotional exhaustion (EE). The data as the interaction term supported it showed a significant effect (beta = -.189; $p < .001$). Moreover, to establish the direction of the supported moderating effect of STT, we probed the significant interaction effect in a graph (see figure 4.2). Overall, STT slightly dampens the negative relationship between ERI and EE in the graph.

Figure 4.2. Moderating Effects of Sensitivity to Terrorism on Emotional Exhaustion through ERI



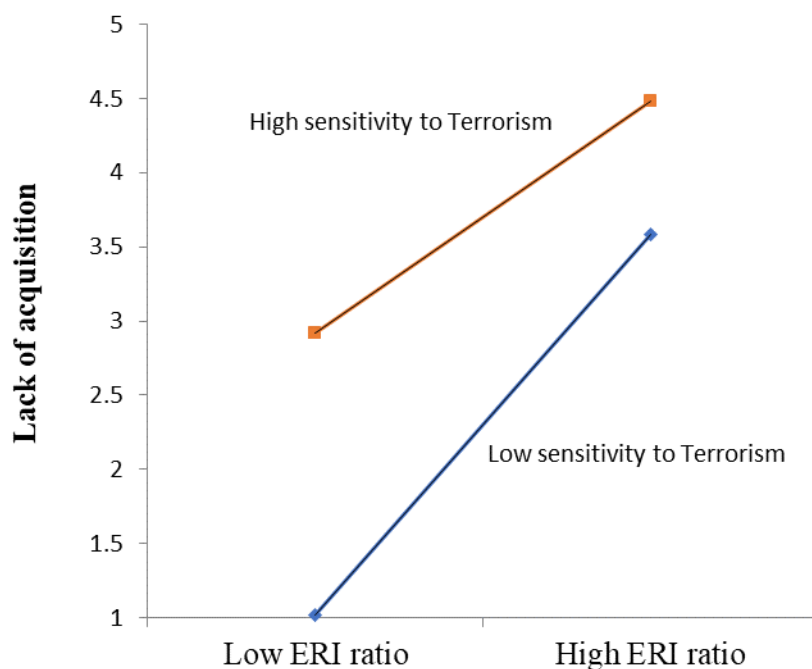
Hypothesis 3 (b) regarding the moderating effect of the STT on the direct relationship between ERI and depersonalization (DP). The interaction term was formed by multiplying the two centered predictor variables: ERI*STT. The data as the interaction showed a significant effect ($\beta = -.196$; $p < .001$). Moreover, to establish the direction of the supported moderating effect of STT, we probed the significant interaction effect in a graph (see figure 4.3). Overall, STT mildly dampens the negative relationship between ERI and DP in the graph.

Figure 4.3. Moderating Effects of Sensitivity to Terrorism (STT) on Depersonalization through ERI



Hypothesis 3 (c) regarding the moderating effect of the STT on the direct relationship between ERI and lack of personal accomplishment (PA). The interaction term was formed by multiplying the two centered predictor variables: ERI*STT. The data as the interaction term showed a significant effect ($\beta = -.284$; $p < .001$). Moreover, to establish the direction of the supported moderating effect of STT, we probed the significant interaction effect in a graph (see figure 4.4). Overall, STT mildly dampens the negative relationship between ERI and PA in the graph.

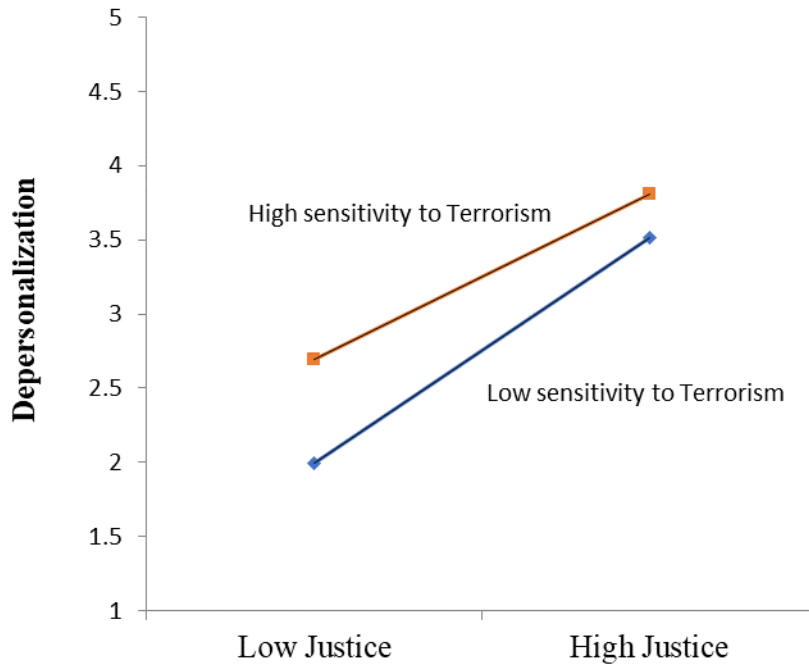
Figure 4.4. Moderating Effects of Sensitivity to Terrorism (STT) on Lack of acquisition through ERI



Hypothesis 4 (a) about the moderating effect of the STT on the direct relationship between OJ and EE. The data as the interaction term showed a no significant. Therefore, it is not reported here.

Hypothesis 4 (b) regarding the moderating effect of the STT on the direct relationship between OJ and DP. The interaction term was formed by multiplying the two centered predictor variables: OJ*STT. The data as the interaction term showed a significant effect ($\beta = -.107$; $p < .01$). Moreover, to establish the direction, we probed the significant interaction effect in a graph (see figure 4.5). Overall, STT somewhat dampens the negative relationship between OJ and DP in the graph.

Figure 4.5. Moderating Effects of Sensitivity to Terrorism (STT) on Depersonalization through Organizational Justice (OJ)



Hypothesis 4 (c) regarding the moderating effect of the STT on the direct relationship between OJ and PA. The interaction term was formed by multiplying the two centered predictor variables: OJ*STT. The data as the interaction term showed a significant effect ($\beta = -.17$; $p < .001$). Moreover, to establish the direction, we probed the significant interaction effect in a graph (see figure 4.6). Overall, STT slightly dampens the negative relationship between OJ and DP in the graph.

Figure 4.6. Moderating Effects of Sensitivity to Terrorism (STT) on Lack of acquisition through Organizational Justice (OJ)

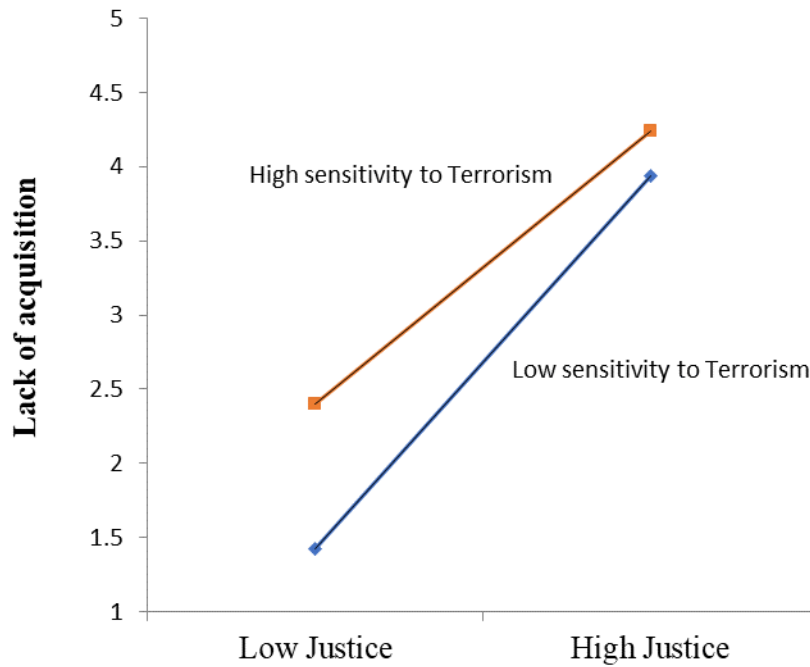


Table 4 5. Summary of Moderating Effects

	B	P
ERI*STT*EE	-0.18	0.00*
ERI*STT*DP	-0.19	0.00**
ERI*STT*PA	-0.28	0.00*
OJ*STT*DP	-0.10	0.00*
OJ*STT*PA	-0.15	0.00**

***=p<0.001 level, **=p<0.01 level, *=p<.05 level

4.7. Discussion

The aim of this empirical study was twofold, i.e., to test job stress using the ERI framework and its possible effects on job burnout in terrorism-ridden areas. It extends the literature on the employee working in terrorism-ridden areas while recognizing the role of effort-reward imbalance framework in the study (Siegrist, 2016). Consequently, the pursuit of the framework to be based on the rules of effort-reward imbalance framework. Although the motives about all variables including outcome variables are thoroughly explained in the literature review. In this research, we hypothesized organizational injustice would mediate the relationship between the effect of effort-reward imbalance and three facets of job burnout. We also hypothesized sensitivity to terrorism would moderate the relationship between effort-reward imbalance and emotional exhaustion, depersonalization, and lack of personal accomplishment.

The results provided significant support for the proposed hypothesis. The framework further examines the relationship between effort-reward imbalance, resultant job stress and its impact on three facets of job burnout. With the findings in the analysis part, we contribute to the literature by linking the crucial yet, in terms of business, still under-researched construct of the effort-reward imbalance with employees working in terrorism-ridden areas. Bader et al., (2013) has suggested in the *International Journal of Human Resource Management* the relevance of considering the sensitivity to terrorism variable for risky situations. Hence, we formulate organizational justice as a mediator and sensitivity to terrorism as a moderator with the effort-reward imbalance as an independent variable for employees' working in terrorism-ridden areas. It illustrates the mediating effect of organizational justice and the moderating effects of terrorism on job burnout.

More specifically, confirmation of hypothesis 1 regarding the significant relationship between effort-reward imbalance and emotional exhaustion, depersonalization, and lack of personal accomplishment in terrorism ridden areas supported our argument that high effort and low rewards ratio leads to a significant impact on employee's burnout. This gives further authorization to investigate the issue of sensitivity to terrorism and its effect on the external operating environment and employee job burnout. For instance, effort-reward imbalance framework suggests that failed reciprocity in terms of high cost and low gain increase job burnout, which in turn have adverse effects on wellbeing (Siegrist et al., 1997) and in this research high efforts at the workplace in terror-ridden areas are a significant risk to employees' health. Under those circumstances, the feeling of physical danger and mental tiredness are pervasive in dangerous areas (Malik et al., 2014; Greenberg & Babcock-Dunning, 2012; Soomro et al., 2018). Consistent with the literature, Bader (2015) also reported significant negative relationship of sensitivity to terrorism with compensation for expatriates (-.113*).

Moreover, Figure 4.2, 4.3 and 4.4 describes the significant effect of sensitivity to terrorism which is weak for low sensitivity and strong for high sensitivity of terrorism. Hence, the higher the sensitivity of terrorism, higher will be the effect; it straightens the research on sensitivity by Reade (2009). These findings are novel with the notion of employee health and wellbeing working in the face of discontinuous incidents. It refers to the protection of employees from incidents and establishes a safe working environment so that employees fully engage in their work without any distraction.

The results of this study also support the hypothesis of the indirect effects of ERI on employee emotional exhaustion, depersonalization, and lack of personal accomplishment

through the mediation of organizational injustice. The reconciliation between the ERI model and research on justice had been mentioned previously by other authors (Kivimäki et al., 2007; Topa et al., 2016). According to the ERI framework, uncertainty in terrorism-ridden areas create a disturbance to make it volatile for employees to work. Hence employees looking for fair organizational policies, failure to this may increase their exhaustion, depersonalization, and lack of personal accomplishment. Table 4.4 describe results, where the indirect effect is significant in all the cases. It is essential to understand that ERI wire organization justice is related to three facets of employee burnout.

So, the organizational justice is critical variable of the equation and is an excellent way to test employee burnout in terrorism ridden areas. The mediation process underlies this indirect relationship. Initial conditions of uncertainty may be associated with increased vulnerability of employees who attend their offices daily in the terrorism-ridden environment. Second, this uncertainty is sometimes resorting more frequently determine the adequacy of the rewards received considering the notion of working in terrorism-ridden areas. Finally, the situation of risk as it is simultaneously uncontrollable, violent and full of terror could trigger attributive processes that would lead to saying the unfair organizational justice for the mismatch of effort-reward imbalance which has a further effect on the facets of employees' job burnout.

In conceptualizing the effort-reward imbalance effects on emotional exhaustion, depersonalization, and lack of personal accomplishment, we also identify other potential variables that may be included in the subject for future research. However, in the ERI framework, we regard efforts and rewards as the crucial point for focusing on work while sensitivity to terror works as a moderator which affects three facets of employee job burnout.

More specifically confirmation of hypothesis 3, the moderating effect of sensitivity to terrorism on the relationship between ERI and three facets of employee job burnout were supported, thus accumulating favorable evidence for moderating hypothesis of the ERI framework as described by prior studies (Bader, 2015). The results provided support for this framework which may have increasing cost on the facets of employees' job burnout. In this research study, results showed the weaker negative value of the interaction which supports the idea that employees with higher sensitivity to terrorism will show more signs of emotional exhaustion, depersonalization and lack of personal accomplishment compared with the low sensitivity to terrorism employees', who show fewer effects. Additionally, STT strengthens the positive relationship between ERI and burnout.

Moreover, sensitivity to terrorism could help to explain three facets of burnout impediments due to terrorism. It is an essential strength of the ERI framework applied in this research as interaction with sensitivity to terrorism, and it extends scarce literature on the moderator between effort-reward ratio and job burnout. The broad significance of the study is that it addresses a gap for the organizations running in terrorism-ridden areas where discontinuous attacks are rampant and its indirect costs associated with the organization. The research helps our understanding of how to support employees' effort with fair rewards to motivate them working with increased passion with dampening positive relationship with three facets of employee job burnout. This study also addresses, how to manage employees in the risky areas that could decrease potentially undermining effects of the environment. The study's findings give authorization to the effects among efforts-rewards imbalance framework, organizational justice, sensitivity to terrorism and three facets of employee burnout working especially in terrorism ridden areas.

4.7.1. Study Implications

This study has made some crucial contributions to the existing literature on the effort-reward framework and organization studies. This is one of the few studies that investigated the effort-reward imbalance framework using organization justice as a mediator, sensitivity to terrorism as a moderator and employee exhaustion, depersonalization, and lack of personal accomplishment as an output variable. This study examined the role of sensitivity to terrorism as a moderator which suggested a significant relationship with three facets of burnout. To our knowledge this is the first of its study which have hypothesized and tested such moderating effects.

Further, the role of sensitivity to terrorism as a moderator has been empirically tested for the first time in the same context. The results of this study also suggest some important recommendations for managers running in high-risk areas to accomplish maximum desired goals from the employees. They need to work closely with employees, provide physical safety from exposure to terrorism and provide safe environments so that they work without any distraction. Also, provide them with latest anti depression therapies to avoid terrorism stress.

4.7.2. Study Limitations and Future Research Directions

This study has some limitations which may be used as an opportunity for future research. This research was done only in one country and data was collected from two cities of Pakistan which experienced most of the terrorist attacks that limits the generalizability to other research contexts, generalization must be treated with carefulness in this regard. We recommend that in future, more qualitative studies should be used for a thorough understanding of these

phenomena. Future studies might examine mechanisms that drive the effort-reward balance, organizational justice, sensitivity to terrorism and burnout relationship in more details in other contexts.

Further, the results of this research study highlight the importance of effort-reward imbalance and organizational justice in terrorism ridden areas. The proper balance between effort-reward balance will have a positive impact on employees even they work in terrorism-ridden areas. The success of staff working in dangerous war-torn regions is a complex phenomenon, and although it is not extensively researched, there is still room to explain this phenomenon in detail. This study is an early attempt to analyze the relationship between the ERI framework with sensitivity to terrorism and emotional exhaustion, depersonalization, and lack of personal accomplishment at work separately. We hope that our findings will lead to future research on the increasingly important problem on the model of ERI and sensitivity to terrorism, as well as mitigate its negative indirect impact on companies operating in terrorism-ridden areas.

Moreover, the study makes significant contributions to the organization studies literature and at the same time to the areas of human resources management. First, it confirms the classical hypotheses of the ERI model in a sample of employees working in terrorism-ridden areas. As mentioned above, the ERI framework, regards efforts-rewards balance as the central point for concentration at work while disbalance create employee job burnout working in risky areas. Accordingly, we have a confirmation of the positive relationship between effort-reward disbalance and three facets of burnout. Second, this study tests an extension of the ERI framework through the moderation of sensitivity to terrorism for the first time between effort-

reward disbalance and burnout which found significant support. Third, this study examined organizational justice as a mediator which is also a considerable extension in the ERI framework.

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**Chapter 5: The relationship between Sensitivity to Terrorism,
Psychological Resilience, and Psychological Wellbeing; Analyzing the Role
of Gender Working in Terrorist-Ridden areas; A Multigroup Study
(EURAM, 2019)**

Objective

The next stage after investigating effort-reward imbalance (Chapter 4, EGOS paper, 2019) was to analyze the role of gender working in the similar context. The rationale of this study was to investigate influence of terrorism stress and role of resilience and onward influence on the wellbeing of employees. It is pertinent to mention here is that in the qualitative study (Chapter 2); results identified themes such as terrorism fear, terrorist attacks, health and wellbeing issues, difficulties, toughness and recovery in these times because of discontinuous incidents. Hence, based on the results of (Qualitative research, chapter 2) the current study (chapter 5) applied the Conservation of Resources (COR) framework, along with psychological resilience as a mediator and psychological wellbeing as an outcome variable in the study context.

Abstract: This study undertakes the relationship between sensitivity to terrorism (STT), employee psychological wellbeing (WB) and employee psychological resilience (RS), among male and female groups. The study uses the Conservation of Resources (COR) framework. The two groups (male and female) consisted of employees employed in universities. Using a 432 sample size data collected during a period when terrorist attacks were at a peak. We used structural equation modeling (SEM) to test our proposed hypotheses. In the results we have a significant relationship between STT and WB. RS mediated the influence of STT on WB. Multigroup investigation proposed significant differences between the two groups, suggesting sensitivity to terrorism and psychological wellbeing is stronger in the male group than in the female group. Hence, the hypotheses that working in ongoing terrorism and psychological wellbeing is significantly supported in the male group, while partially supported in the female group. In this regard various classical limits are associated, limitations include single country setting. The study findings expand our knowledge of the COR framework on employee WB and the positive role of RS for employees working in terrorist-ridden areas. The article concludes with some implications and guidelines for future research.

Keywords: Stress, sensitivity to terrorism (STT), resilience (RS), well-being (WB)

Introduction

Research on terrorism suggests that exposure to violence and specifically terrorism hurts health and wellbeing (Bader & Manke, 2018; Bleich et al., 2003; Lii, 2002; Fischer et al., 2006). There is limited research available and small extent is known about how exposure to terrorism can have an impact on the employee work behaviors and outcomes in the business and management fields, especially on gender (Bader et al., 2015). This study aims to explore gender issues pertaining to psychological resilience.

Gender roles are a social construction that surrounds and have a range of attitudes and behaviors that are generally acceptable, appropriate or desirable for people based on their actual or perceived sex (Levesque, 2011). Gender roles usually occur mainly around how femininity and masculinity are regarded (Gochman, 2013) even though these understandings have exceptions and variations in various cultures (Alters & Schiff, 2009). The essentials regarding these gendered expectations may vary substantially among cultures, while other characteristics may be common throughout a range of cultures. However, there is scarce research available on social roles in developing societies.

While, in developed societies, gender roles are becoming more prominent as women increasingly enter the workforce (Jones et al., 2014). In the same way, a trend in developing societies shows a gradual increment of women workforce participation in almost every sector of the economy (World Bank, 2017). Research shows generally women are facing increasing disparity in workplaces (Byrd, 2018). Their compensation all over the world are fifteen to fifty percent less than men working the same jobs, and the question arises *why* women should work at lesser wages for the same situation or job? To justify this difference both societal and biological-

based explanations have been used to explain this disparity (Desai et al., 2014). The reality is working in risky areas is a problem for male and female employees and the context amplifies stress. However, there is scarce research available on gender role conflict for men and women living in risky areas (Soomro et., al 2018).

In addition to this, culture and society also supplies gender roles for both women and men in eastern and western societies. As said above gender roles in western societies are quite developed. In western world women have marriage and reproductive rights, parental leave, rights to participate in politics and governmental activities. These countries also have the greater participation in the workforce (WCC, 2018). While concerning to eastern societies women are less developed in all these indicators (Risman, 2004). They are brought up classically in societies to invest in family, home, and love and social relationship, while men are brought up to spend in achievement. A woman's confidence in one's abilities depends on how love goes home. Therefore, divorce and separation hit women harder deplete her psychological resources than men. While men take every decision whatever he wants at home, or work, it may create risk for him. For instance, no promotion, no increment or no appreciation deplete a man's psychological resources. In like manner, a woman not only has the traditional role of mother and wife but now she is going out for a job (Seligman, 2006). So, every extra demand produces more pressure than ever before and thereby more psychological distress. Hence, given in the literature, this multigroup study, we analyzed *how* sensitivity to terrorism affects female and male respondent's wellbeing and *what* role resilience plays for uplifting their wellbeing.

With the aim of exploring employee wellbeing concerning female and male groups, the present study tries to address these, by using the Conservation of Resources theory (Freedy &

Hobfoll, 2017). Based on this, first, we discuss the context of working in terrorism-ridden areas and how employees (male and female) react to it. It will add to our understanding of how ongoing terrorism affect employee and their psychological wellbeing, and after we have introduced resilience as a psychological resource that may lessen its effects. We argue that ongoing terrorism will take a toll and deplete employees limited physical, emotional, and cognitive resources, which cause loss cycles, in turn, decreasing employee's psychological wellbeing. While psychological resilience will take a toll and it might add to employees physical, emotional, and cognitive resources gain, which enhance gain cycles, in turn, increasing employee wellbeing. Besides, the relation between ongoing terrorism and psychological resilience and how it mediates has not studied from the gender role perspective in discontinuous incidents.

Secondly, we argue that sensitivity to terrorism will lead to lower psychological wellbeing more for female workers (because of gender roles) than the male workers in terrorism-ridden areas. We suggest that psychological resilience may play a significant role when stressors reduce the psychological resources of employees. Also, we assume that the intensity of the association between the three constructs will be stronger for the female group than the male group in the multigroup analysis.

5.1. Literature Review

5.1.1. Conservation Of Resources (COR) Theory

COR theory states that humans make earnest efforts to obtain, maintain and protect their resources, so they can apply to accommodate, withstand or to overcome threats to avoid stress and keep fit into the organizations and society (Hobfoll, 1988). It predicts human health, wellbeing, and a positive sense of self in stressful challenges (Freedy & Hobfoll, 2017). While

social psychology gives special attention to individual differences, it covers to the greatest extent that behavior predicts human's biology and predict the roles that exist within a specific context. By extending it, humans build, foster, and protect social and societal systems that enable valuable ends (Hobfoll & Lilly, 1993).

COR theory is based on some principles which are already validated for example (Hobfoll, 2011; Hobfoll & Shirom, 2001; Wright & Hobfoll, 2004), it precisely portrays and helps to understand the theory and its application in the context of stress and organization studies. Different from other stress frameworks, COR theory gives particular importance to 'stress', and clearly defines both loss and gain cycles. It emphasizes that the comprehension of both cycles is important for people who face stress and stand against stress in future times (Hobfoll, 1989). According to theory, stress takes place in three steps; first, when there is a threat of a loss of resources, second, an actual net loss of resources, and third, a lack of gained resources next to the spending of resources. Therefore, resources are defined as things that one values, specifically objects, states, and conditions (Halbesleben et al., 2014).

Besides, COR theory is based on these premises; firstly, Primacy of resource loss, this tells that it is more harmful to individuals to lose resources compared to when there is a gain of resources (Holmgreen et al., 2017). The comparative relation of the impact of resource loss is seen in terms of a ratio in terms of quantity and size, as losses have a substantial impact and typically affect people at quick speed. In other words, it means that a loss of pay will be more harmful than the same gain in pay would have been helpful. Moreover, the loss is principal part in humans, especially when conditions signal sounds of loss, COR theory suggests that

psychological resilience responding must counteract or complement the powerful, usually rapid, and often the long-term impact of resource loss (Chen et., 2015).

Secondly, people will tend to invest in resources to protect against loss of resources, to recover from losses, and to gain resources (Holmgreen et al., 2017). As mentioned in the first one that people with more significant resources are less exposed to the possibility of being a victim of resource loss and they are more capable of engineer resource gain. Comparing to those with fewer resources are more exposed to the chance of being victim to resource loss and less capable of resource gain (Halbesleben et al., 2014). Hobfoll et al., (2016) investigated that resources are beneficial and can enhance performance, while a lack or depletion of resources can cause stress. Thus, COR theory states that loss of resources will drive individuals into specific levels of stress. Until now COR theory has been applied into various fields such as burnout, the area of positive psychology and different work situations, please check (Chen et al., 2015; Freedy & Hobfoll, 2017; Gorgievski & Hobfoll, 2008; Halbesleben et al., 2014; Wright & Hobfoll, 2004). Moreover, little research has investigated how the loss of resources contribute more to lower wellbeing in women than in men working in terrorism areas.

5.1.2. Terrorism and Employee Psychological Wellbeing

Terrorism fear is a significant cause of stress for people living under the shadow of ongoing terrorism. Numerous studies have examined stress-related health symptoms following terrorist attacks (Canetti-Nisim et al., 2009; DiMaggio & Galea, 2006). The 9/11 terrorist attacks affected people, who experienced the attacks directly (Argenti, 2002, p. 11) and those who suffered it indirectly, such as through the media (Ryan et al., 2003, p. 11). Studies also

investigated levels of distress, lowered sense of security and post-traumatic stress disorder (PTSD) and depression (Argenti, 2002; DiMaggio & Galea, 2006; Lii, 2002).

The present study will examine the terrorism effects on employee psychological wellbeing through the lens of COR theory. The COR theory describes the motivation of individuals to obtain, keep and protect resources (Hobfoll et al., 2016). In times of terrorism, self-preservation (i.e., staying alive with family members and friends), is one of the individuals' key priorities. If one's self-preservation is vulnerable or weak, then this state causes stress (Hobfoll et al., 2007). In fact, terrorist attacks are random, unpredictable targeting civilians who are not engaged in fighting, which may lead them injury or death of the one-self, friends, or family. Comparatively, if "threat to life" associated with terrorism than it may have differential effects varying according to circumstances on one's resources (Wright & Hobfoll, 2004). It is equally important to describe that suicide bombing are expected to cause people strongly; it generates enormous fear because of the irrationality of the bomber causing himself or herself to die is a confrontation to mortality salience (Pyszczynski et al., 2003).

Whereas terrorism is prevalent, it may affect all domains of life, including employees and their work domains. COR theory suggests that resource loss primarily caused by terrorism results depletion of individuals' resources (called loss cycles). COR theory places a strong emphasis on downward spirals through which resource loss in one domain, e.g., negative effects of terror on general well-being. Well-being includes a range of possibilities and activities aimed at achieving a physical state of being active, psychological willingness and social fulfillment of one's wishes (Goens, 2017; Naci & Ioannidis, 2015). Indeed, studies have shown that an individual who undergoes gradual resource depletion may have declining performance and satisfaction at work

(Halbesleben et al., 2014). Decreasing wellbeing is a sign of the declining performance of an employee, which negatively affects the team's performance and the entire organization's health. Therefore, we focus on this research on psychological wellbeing as the outcome variable because the literature has found it as an essential outcome at work.

5.1.3. COR and Psychological Resilience

As said in the premise of COR theory, resources are the primary function of resilience, available at someone disposal that meets the required demand or situation. Not to mention, less has been written about terrorism and its effects on an individual and how personal, social and material resources aid the course of recovery in the terrorism situations for enhanced adjustment and adaptation. COR theory helps to explain resources by supplying resource loss and resource gain cycles. Meanwhile, resource gain brings resources into existence by the process of 'gain spirals.' These gain cycles seem probable, for the reason that after resource gains are made, greater resources become available. This principle distinguishes COR as a proactive theory, and it has important implications for stress prevention and enhancing resilience (Chen et al., 2015).

While, terrorism fear deplete employee resources (e.g., financial, psychological, social) and have a significant effect on their work-related outcomes (Hobfoll et al., 2007). It is most likely that ongoing terrorism diminishes the emotional and psychological resources of employees working in terrorism-ridden areas. It creates a mismatch between the emotional and psychological demands against the resources an individual own by emotional and psychological resources (Rich et al., 2010). So, in the events that create a stressful situation, psychological resilience is thought as a mechanism of 'positive support' after an adverse situation. Research shows that resources help in coping, adaptation, and growth and increase resilience (Chen et al.,

2015). Resilience exists when a person uses ‘psychological process to promote personal resources and protect it from adverse effects of stressors’ (Hobfoll, 2011). It provides psychological support to cope with resource loss (Chen et al., 2015). Bonano (2018) defined resilience, as 'the ability ... to maintain a relatively stable, healthy level of psychological and physical functioning' in the face of highly disruptive events. This concept is particularly important because of findings following a range of traumatic events, which show that large percentages of people exposed to such events are either entirely or almost symptom-free (Van Der Vegt et al., 2015). Resilience helps individual following adversity and increase wellbeing (Chen et al., 2015). Accordingly, employees with greater psychological resilience may better deal stressful situations to those of others having lesser psychological resilience.

In the light of COR theory, psychological resilience is an asset that helps to improve employee psychological wellbeing in stressful times (Luthans et al., 2018). In the workplace, psychological resilience is seen as a protective factor used to reduce risk within an individual and his/her environment (Chen et al., 2015). It allows them to stay focused during stressful times and let them move on without severe long-term effects. Factors include coping such as temperament, spirituality, cognitive ability, a positive outlook on life and emotional stability (Luthans et al., 2018). Furthermore, lack of psychological resilience cause stress, burnout and predicts poor employee work outcome (Long & Bonanno, 2018). Much less is written on ongoing terrorism that may diminish the resources of employees (Soomro et al., 2018), and it affects employee wellbeing working in terrorism-ridden areas. Here we suggest psychological resilience may serve as a pathway through which ongoing terrorism leads to lower employee wellbeing while we expect resilience will mediate the relationship between exposure to continuing terrorism and

wellbeing. Here, resilience is used as a mediator because in the research there is a way to use it as a mediator. Thus, on the basis of literature review, we hypothesize as:

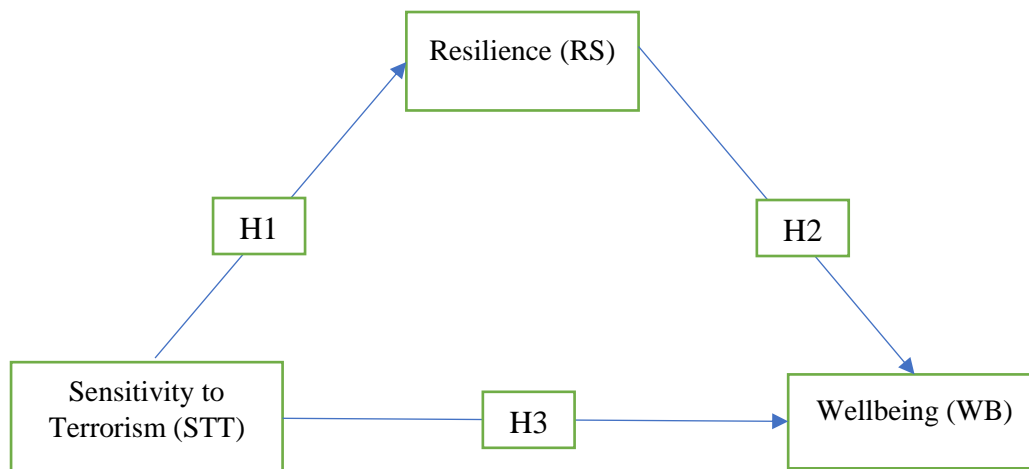
H1: Sensitivity to terrorism will be significantly associated to employee psychological resilience.

H2: Employee psychological resilience will be significantly associated to employee psychological wellbeing.

H3: Employee psychological resilience will mediate the relationship between sensitivity to terrorism and employee psychological wellbeing working in terrorism-ridden areas.

H4: We argue that sensitivity to terrorism will lead to lower psychological wellbeing more for female workers than the male workers in terrorism-ridden areas and assume that the intensity of the association will be stronger for the female group than the male group in the analysis.

Figure 5. 1. Conceptual Framework



5.2. Methodology

Pakistan has experienced repeated attacks after 9/11 and handled deaths of civilians and law enforcement personnel's in more than 12502 events from 2002 to 2016 (Global Terrorism Database, March 2018). Discontinuous incidents in Pakistan have created an atmosphere of fear and insecurity for all levels of society. According to the aim of the study, data was collected from Quetta and Peshawar during December 2016-January 2017 and participation in the study was voluntary. While questionnaires were written in the English language and we took a research sample of educational institutes.

Because of time and resource constraints, probability-sampling was not suitable as it was not possible to reach enough employees in these areas. For the study purpose, commonly used non-probability purposive sampling method was ideal because of the appropriate response keeping in view the sensitive situation of the region (Coyne, 1997). In total 950 questionnaires were distributed, and we received a complete set of 432 responses. Further, we have examined sensitivity to terrorism as an independent variable, resilience as a mediator and wellbeing as a dependent variable in the study.

5.3. Scales and Measures

5.3.1. Sensitivity to Terrorism (STT)

Sensitivity to terror was measured by a 3-item scale (Glenn Richey & Reade, 2009). The respondents were asked to write down how much stress they associate with terrorist attacks, or if they feel more stressed at work after a terror incident. The three items assessed as employees came across/heard news of any terrorist event. I seem to lose enthusiasm for work whenever I get

news of terrorist incident”, “I feel tenser at work when there is a fresh incident” and “I sometimes miss work or find it difficult to perform my job well due to the mood created by the terrorist incident” The items were measured using five-point Likert scale.

5.3.2. Resilience

Resilience was measured by a 14-item scale (Wagnild, 2009). The scale measures resilience including personal competence, acceptance of self and life. The respondents were asked to write down resilience by mentioning a statement on a scale after they identified most stressful events. The 14 items assessed the responses on that event. The sample questions of the scale are; “when I am in a difficult situation, I can usually find my way out of it”, “my belief in myself gets me through hard times”, I can get through difficult times because I’ve had trouble before” The items were measured using five-point Likert scale.

5.3.3. Wellbeing

Wellbeing was measured by a 7-item scale developed by The Warwick-Edinburgh Wellbeing Scale (Guhmundsdóttir, 2009). The respondents were asked to write down the wellbeing score by mentioning a statement on a scale. The seven items assessed the responses on it. The sample questions of the scale are; ‘I am feeling optimistic about the future,’ I have been feeling relaxed,’ I have been thinking clearly’. "The scale is developed by the University of Warwick and the University of Edinburgh, and is jointly owned by NHS Health Scotland, the University of Warwick and the University of Edinburgh." The items were measured using a five-point Likert scale.

5.4. Results

5.4.1. Factor Analysis

Before the assessment of measurement model and hypotheses testing, we examined exploratory factor analysis (EFA). The value of the KMO is 0.95 and Bartlett's test of sphericity is significant ($p < 0.001$). Both show that the set of variables are related adequately for factor analysis. The analysis extracted three factors based on the eigenvalue greater than 1 explaining 67.21 percent of the variance for the complete set of variables. Factor 1 was labeled sensitivity to terror formed of 3 items reported on a 5-point Likert scale that explained 45.49 percent of the variance with factor loadings from .57 to .81. Factor 2 included 14 items that explained 14.96 percent of the variance with factor loadings from .72 to .99. Factor 3 comprised seven items that explained 6.78 percent of the variance with factor loadings from .61 to .83. The whole analysis means that we have found three clear patterns among respondents. All these three tendencies are independent of one another (i.e., they are not correlated).

5.4.2. Common Method Bias

Since data used in the study is cross-sectional and single-sourced, which may limit the conclusions drawn about relationships between the key concepts. Therein, we used the common latent factor test, using common latent factor method in AMOS to investigate the impact of common method bias in data (Podsakoff et al., 2012). We add a new latent factor, common latent variable in AMOS to see what common variance shared among all the observed items in the model is significantly different from zero. We applied the common method bias test, by comparing the unconstrained common method factor model to the fully constrained 'zero

constrained' common method factor model. The results showed that 6 out of 24 paths that seem to be affected by common method bias because they showed a difference when we add common latent factor which is extracting part of the variance that was explained by these indicators for these latent factors. So, we kept the common latent factor for our structural model by imputing factor scores letting it to commonly in factored common latent factor (CLF) uses regression weights and created common method bias adjusted composites.

5.4.3. Assessment of Measurement Model

This study followed the two-step approach Anderson and Gerbing (1988) for the assessment of the measurement model. In this regard, first, we carried out a confirmatory factor analysis (CFA) to establish the state of acceptability of the overall two-group model with AMOS 22. We examined the factor structures (FL) for sensitivity to terrorism, psychological resilience and psychological wellbeing of employees working in terrorism-ridden areas (please see table 5.1). The final model showed good fit (χ^2 (246) = 617.560, $p < .001$, Robust CFI = .953, TLI = .947, RMSEA = .059, SRMR = .040. Recommended values for the model qualification are; CFI = 0.90, TLI = 0.90, RMSEA = 0.08 (cut-off point) (Hair et., al 2010). Our model shows the above properties, it indicates model is properly fit with the sample data.

Table 5.1. Results of measurement models.

	Overall (N 432)			Male Group (N 247)			Female Group (N 185)		
	FL	CR	AVE	FL	CR	AVE	FL	CR	AVE
Sensitivity to Terrorism		0.736	0.491		0.714	0.466		0.960	0.634
SenTT1	0.766			0.73			0.814		
SenTT2	0.793			0.808			0.767		
SenTT3	0.507			0.46			0.582		
Resilience		0.966	0.671		0.969	0.690		0.768	0.530
RS1	0.825			0.855			0.768		
RS2	0.871			0.877			0.855		
RS3	0.891			0.892			0.878		
RS4	0.816			0.851			0.739		
RS5	0.85			0.851			0.842		
RS6	0.759			0.748			0.758		
RS7	0.866			0.845			0.88		
RS8	0.793			0.844			0.74		
RS9	0.71			0.747			0.656		
RS10	0.816			0.86			0.759		
RS11	0.765			0.717			0.839		
RS12	0.78			0.797			0.742		
RS13	0.877			0.87			0.877		
RS14	0.828			0.855			0.778		
Wellbeing		0.892	0.544		0.914	0.604		0.745	0.327
WB1	0.794			0.817			0.623		
WB2	0.63			0.616			0.837		
WB3	0.819			0.833			0.717		
WB4	0.767			0.82			0.555		
WB5	0.672			0.761			0.149		
WB6	0.748			0.795			0.473		
WB7	0.716			0.778			0.36		

Note: FL =factor loading; CR = composite reliability; AVE= average variance extracted.

To prove whether study variables underlying structure are accurate, we examined reliabilities and validities of the three-factor measurement model before testing the structural model. The validities mentioned in Table 5.1, describes that the level of internal consistency in each construct was acceptable, with convergent validity (CR) as a shared of evidence ranging from 0.714 to 0.969 (all above > 0.7). These refer to the extent to which measures of the same construct are correlated and supplies empirical evidence of the items that are indicators of a specific construct sharing portion of the variance in common. While average variance extracted (AVE) estimates are pretty close to the recommended 0.5 thresholds (Hair et al., 2016). The model's all factor loadings, including reliabilities worked and all are fine.

Table 5.2 describes means, standard deviations, correlations among constructs and the average variance extract (AVE) on the diagonal. It overviews the validity of the model of factors, and we have all the latent factors here and their C.R using (Hair et al., 2011). The method is a more correct evaluation of discriminant validity. It refers to the extent to which constructs are distinct. In other words, distinct validity supplies empirical evidence that a construct is unique. We test the discriminant validity by comparing maximum shared variance (MSV) with AVE for each construct. MSV is the square root of inter-correlation between two constructs. If MSV is less than $< AVE$, we can confirm the discriminant validity. In this study variance extracted estimates, ranging from 0.68 to 0.83, exceeded all correlations for each pair of constructs, which ranged from 0.18 to 0.53. So, the square root of that AVE on Table 5.2 on diagonal must be greater than any correlation with another latent factor, and it is fine. This implies discriminant validity, (CR implies reliability), AVE implies convergent reliability.

We confirm the discriminant validity, and these results show that three factors are distinct and unique. In addition, confirmatory measurement models clearly show the existence of measurement properties ($\chi^2 (246) = 617.560$, $p < 0.001$; $\chi^2/df = 2.10$; root mean square error of approximation (RMSEA = 0.059); comparative fit index (CFI = 0.953); and standardized root mean square residual (SRMR = 0.040). This suggests a desirable configural invariance is reached and furnished support that the pattern of fixed and non-fixed parameters in the research model is identical for the male and the female groups. For examination of metric invariance, a procedure was employed, and in it, the factor pattern coefficients were constrained to be equal (Teo et al., 2009). These constraints increased the χ^2 value from 617.560 to 941.614, advancing forty-six degrees of freedom. Because the metric invariance model (Model 2) is nested within the baseline model (Model 1), a χ^2 difference test was performed. Given that the χ^2 difference of 324.054 with forty-six degrees of freedom was not statistically significant at $\alpha=0.05$, this implies metric invariance.

Table 5.2. Means, Standard Deviations, and Correlations among Constructs

	Overall (N 432)					Male Group (N 247)					Female Group (N 185)				
	Mean	SD	RS	ST	WB	Mean	SD	RS	ST	WB	Mean	SD	RS	ST	WB
RS	3.29	1.08	0.82			3.29	1.08	0.83			3.35	1.00	0.82		
STT	3.46	0.78	0.47	0.70		3.44	0.78	0.44	0.68		3.41	0.81	0.53	0.79	
WB	3.49	0.80	0.36	0.30	0.74	3.49	0.80	0.43	0.39	0.78	3.44	0.48	0.18	0.20	0.76

Note: The square root of the AVE on the diagonal (in bold).

5.4.4. Assessment of the Structural Model

As soon as the measurement model accuracy was proved, and measurement invariance was proven, we carried out structural equation modeling (SEM) analyses to examine the proposed hypotheses. Overall, Goodness-of-fit indices showed that the two-group structural model fit the data reasonably well ($\chi^2(246) = 617.560$, $p < 0.001$; $\chi^2/df = 2.510$; RMSEA = 0.059; CFI = 0.953; TLI = .947; and SRMR = 0.040). The model's fit, as wrote down by these indexes, was deemed satisfactory; thus, it provided a good basis for testing the hypothesized paths.

In the male model, Hypothesis 1; sensitivity to terrorism ($\beta_1 = 0.670$; $t = 8.00$; $p < .05$) has a significant association with psychological resilience (Hypothesis 1). Psychological Resilience ($\beta_2 = 0.160$; $t = 3.454$; $p < .05$) was detected as a significant predictor of psychological wellbeing (Hypothesis 2). Likewise, sensitivity to terrorism ($\beta_3 = 0.470$; $t = 4.163$; $p < .05$) significantly predicted psychological wellbeing of employees (Hypotheses 3). The results of the bootstrapping procedure showed that psychological resilience mediates the effect of sensitivity to terrorism on psychological wellbeing. The standardized indirect effect is 0.076, statistically significant ($p < .05$) at 95% confidence interval. The summary of results is presented in Table 5.3. The results of mediation used Preacher & Hayes (2004) bootstrapping method, confirmed that psychological resilience mediates the relationship between sensitivity to terrorism and employee psychological wellbeing for the male group. In other word, sensitivity to terrorism has a significant direct effect as well as a significant indirect effect on psychological wellbeing. The direct effect between two is 0.47, while standardized indirect effect is 0.076, statistically significant ($p < .05$) at 95% confidence interval.

In the female model, sensitivity to terrorism ($\beta_1 = 0.674$; $t = 8.00$; $p < .05$) significantly influenced psychological resilience (Hypothesis 1). Psychological resilience ($\beta_2 = 0.158$; $t = 3.454$; $p < .05$) was detected as a significant predictor of psychological wellbeing (Hypothesis 2). While sensitivity to terrorism ($\beta_3 = -0.062$; $t = -0.767$; $p < .10$) remained inconsistent in case of female group (Hypotheses 3). The standardized indirect effect is 0.130, statistically significant ($p < .10$) at 90% confidence interval. The results of the bootstrapping procedure showed that psychological resilience mediates psychological wellbeing in the group. So full mediation takes place in the female group. The summary of results is presented in Table 5.3.

Table 5. 3. Direct and Indirect Effects of Resilience on Wellbeing

Group	Hypotheses	Direct effect	Standardized Indirect effect	Result
Male	STT → Resilience → WB	.47*	.076*	Partial Mediation
Female	STT → Resilience → WB	-.062	.130†	Full Mediation

**= $p < .01$; *= $p < .05$; † $p < 0.10$; ns=not significant

5.4.5. Multigroup Analysis

We applied the Chi-square differences ($\Delta\chi^2$) test with one degree of freedom. We freely estimated to compare the two models (constrained model versus unconstrained model) except constraining one path at a time, equal to zero across groups. The Chi-square test was significant showing the effect was different for both models (constrained model versus unconstrained model) for each of the three path coefficients successively (H1, H2, H3; see Fig. 1). The χ^2 value of the unconstrained model was subtracted from the χ^2 value of the constrained model. The

significant differences in chi-square value ($\Delta\chi^2$) between the constrained model and unconstrained model with one degree of freedom (Δdf) were assessed with the critical value of 3.84 at the 0.05 level of significance (Morrison, 2005). The summary of results is shown in Table 5.4.

Table 5.4. Multigroup Results

Hypothesized path	Unconstrained model	Constrained model	Chi square
	Chi-square (df = 246)	Chi-square (df = 247)	difference($\Delta df=1$)
H1: STT \rightarrow RS	617.560	694.951	77.391**
H2: RS \rightarrow WB	617.560	640.384	22.824**
H3: STT \rightarrow WB	617.560	624.415	6.855**

** $p < 0.01$.

For the link between sensitivity to terrorism and psychological resilience, the difference in χ^2 between the constrained model ($\chi^2= 617.560$; $df= 246$) and unconstrained model ($\chi^2= 694.951$; $df= 247$) was significant and detected significant differences ($\chi^2 (\Delta df = 1) = 77.931$). As for the link between psychological resilience and psychological wellbeing, statistically, significant group differences were detected based on the χ^2 between the two models ($\chi^2 (\Delta df = 1) = 22.824$). Finally, for the link between sensitivity to terrorism and psychological wellbeing, the difference in χ^2 between the constrained model ($\chi^2= 624.415$; $df= 247$) and unconstrained model ($\chi^2= 617.560$; $df= 246$) was also significant ($\chi^2 (\Delta df = 1) = 6.855$). Specifically, in the relations between sensitivity to terrorism and psychological resilience was stronger in the male group than the female group. There is a difference in the size of relations between the female and male groups. The hypothesis, of multigroup supported in this case.

5.5. Discussion

This study aimed to examine the relationship between sensitivity to terrorism, psychological resilience, and psychological wellbeing of employees in the context of ongoing terrorism. The study compared all the relationships concerning male and female groups. Taking everything into account, findings of this study support the COR theory (Holmgreen et al., 2017). According to the theory stressor (sensitivity to terrorism) cause employees' psychological resources (resilience), and eventually causing their working lives difficult. Nevertheless, employees who face terrorism incidents, even after having manifold resources and its continuous consumption might feel health and wellbeing problems. The findings correspond with earlier research, suggesting that sensitivity to terrorism is a predictor of lower employee commitment (Reade & Lee, 2012). In our study we found that sensitivity to terrorism had a significant relationship with psychological resilience for both the male ($B1 = 0.670$; $p < 0.05$) and female groups ($B1 = 0.674$; $p < 0.05$). Under those circumstances, sensitivity to terrorism towards psychological resilience appears in the same way both for male and female groups. As an illustration, this is because of the nature of the workplace under ongoing terrorism, it is obvious from the results that terrorism is resource depleting stressor, with no clear benefit towards psychological wellbeing. Moreover, no statistically significant group differences were found for the sensitivity to terrorism link, suggesting that it as an important predictor of psychological resilience in both groups.

On the association between resilience and wellbeing, the significant relationship was supported in both groups. The results correspond with the findings of COR theory (Hobfoll et al., 2016). However, the significant chi-square differences proved that psychological resilience has a

significant effect on the psychological wellbeing of female employee group ($\beta_2 = 0.160$; $p < 0.05$) as well as on the male group ($\beta_2 = 0.150$; $p < 0.05$). In fact, resilience can make it possible for employees to recover and replenish their resources to survive the psychological sufferings from ongoing terrorism. Similarly, resilience reduced the effect of ongoing terrorism, on employee wellbeing (Van Der Vegt et al., 2015). The finding develops an understanding of the impact of sensitivity to terrorism-related fear on psychological resilience and suggests that individuals through psychological resilience improve their occupational life in stress situations.

Further, employees with resilience can keep their resilience, transform their innocence into power working in violent areas. Taken together, these findings suggest that sensitivity to terrorism leads to a psychological and behavioral change in both groups; however, this relationship is significantly stronger among individuals who are more vulnerable to terrorism than those who are less vulnerable. Obviously, this relationship provides evidence that psychological resilience is a crucial factor for studies with contexts of ongoing terrorism.

For the link between sensitivity to terrorism and psychological wellbeing, the impact of sensitivity to terrorism on psychological wellbeing was significant for the male group ($B_3 = 0.470$; $p < 0.05$), and for female groups ($B_3 = -0.767$; $p < 0.10$). Alternatively, it is accepted at a 90% confidence interval in the case of the female group. The statistics suggest that the females suffered more than male group. It determines female gives up quickly because of their explanations for terrorism fear and it produce long lasting helplessness. Moreover, continuous explanations about adverse events create rumination that leads females to negative consequences and resultantly they are affected. According to the cognitive theory that individuals can choose the way they think (Clark, 2018; Dawson & Napper, 2018), if anyone think continuously about

negative consequences, resultantly he/she will be affected . On the whole, results are corresponding to the findings of social structure theory of gender (Risman, 2004). Further, results suggest that females fall prey to psychosocial pressures in less developed areas and tend to be less dominant than their male counterparts.

This study has made some contributions to the existing literature on the COR theory and organization studies. One such inference arises from the finding that although there are mean differences in sensitivity to terrorism, psychological resilience, and psychological wellbeing between male and female groups, females are more stigmatized as affected in the broader contexts. As described earlier that this is because of their permanent thinking pattern, mulling it over and over trying to analyze with respect to terrorism events, and terrorist incidents trigger it. Hence, when one is under pressure and want to perform well, makes the situation worse by thinking pattern, which is the case for female group in this study.

In conclusion, sensitivity to terrorism triggers great fear among male and female groups working in terrorism-ridden areas. Resilience is a beneficial tool that can be used for successful coping for increasing wellbeing. It gives a set of tools to stop thinking and try to change habits of thought and act when terrorism strikes. While, employers should organize focused programs to improve psychological resilience of employees. They should form strategies that uplift the morale of employees which uplift their wellbeing.

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Chapter 6: Discussion, Limitations, Future Research, and Conclusion

This chapter highlights the general discussion on all the studies. In 6.1, it discusses the findings of the qualitative research, while 6.2 discusses quantitative study's findings. Section 6.3 discusses results and hypothesized relationships of the main variables in the light of prior research of the current studies. Section 6.4 contributions towards theoretical frameworks. Section 6.5 highlights practical applications followed by the limitations of the study in 6.6 and some areas identified for the future research in 6.7. Section 6.6 is based on the conclusion.

Introduction

Terrorism incidents occur all around the globe, and people are adversely affected. This research work is based on four interconnected research studies (one qualitative and three quantitative). In all these studies, it explored and investigated the effects and relationship of exposure to terror, job stress, rumination, organizational injustice, the role of organizational and social support in the prediction of employee outcomes. For this, three separate stress theoretical frameworks applied to analyze relationships and their effects on employee outcomes. Theoretical frameworks applied in the study are (1) Stress Framework of Lazarus and Folkman (1984) (2) Effort-Reward Imbalance (ERI) framework of Siegrist (1998) and (3) Conservation of Resources (COR) framework of Hobfoll (1988).

The literature on exposure to terrorism stressor is often associated with adverse outcomes (Alexander, 2004; Burke & Cooper, 2018; Chalk, 2017). Also, organization context carries variety of factors that causes potential threats to influence employee health and wellbeing. In this study, terrorism, and work stressors both are stressors that cause worry and distress for

employees as these stressors deplete resources (Freedy & Hobfoll, 2017). So, the choice of the variables used in the study are based on wider research gaps particularly in organizational studies and as per the characteristics of Pakistani work context in terrorism-ridden areas. The empirical results significantly supported the proposed hypothesized relationships. The results showed context of terrorism is a resource depleting and employees find work responsibilities as burdensome. The study results helped to explain since the employees were continually under stress, any extra effort in the form of role or targets influence employee work behaviors. It echo the pernicious influence of stressors and its influence on employee work behaviors. The study's results significantly supported the mediation role of rumination, organizational injustice, and psychological resilience. The results of the study are in-line to the findings from employees working in dangerous areas.

Hence, in this section, we attempt to combine and review qualitative and quantitative findings jointly. It gives an advantage and benefit in comparing the strengths and weakness of the overall conclusions of each research. Following are the discussion focussing the qualitative and quantitative study results.

6.1. Discussion based on Qualitative Study

In this work, the first study needs to begin with the contextual meaning of how stressors impact employees working in terrorism ridden areas. To study the contextual meaning of stressors we have qualitative research. The study aimed, what are the factors which hinder employee attitude and behavior working in terrorism-ridden areas. The purpose was not to create generalizable findings but to see detailed insights of various concepts from employees view of reality. This approach is useful for exploration, which can be tested in other studies at a larger

scale. To check how terrorism incidents, affect their attitude and behavior. I have following guided questions:

- What constitutes terrorism stress for employees? How it affects them?
- What context-dependent relationships shape both terrorism stress and job-stress and its effect on employee attitude and behavior?
- In what ways can a better understanding of the terrorism stress-job stress help in case of employee attitude and behavior?
- What effect does terrorism incidents have on employee psychological state working in terrorism-ridden areas?
- How can employee psychological state and behavior can be changed working in terrorism-ridden areas?

The guided questions in the qualitative study lead to the finding that the terrorism stress does exist for employees working in affected areas. Employees responses show that they experience fear in day to day work because of the situation of terrorism. The study confirmed the validity that employees in an indistinguishable situation spend one's life under circumstances of perpetual fear, loss, kidnapping, and stress of terrorism. While some employee described that they lost their colleagues and family member(s) in terrorist incidents, they were concerned about their physical security and sought protection from their employers. The employees respond focusing these phrases like, "we have to go through," "no other option," "adjustment towards," "becoming accustomed to," and "having to live with" suppression. These words describe that it is the employee's view of reality, depicting stressful working and what they experience working in dangerous areas.

Besides, results portray who gives up easily from terrorism and work-induced stress, who never gives up, who continue to live when one is working and living in terrorism-ridden areas with the family. Findings of the study showed respondents, act in the study like never give up and manage to go on rebuild in tough times. According to their views that they have learned the courage to carry on their work activities and family matters while living in these areas. As investigated in the third quantitative paper, it is the attribute of resilience in the face of terrorism, need not be a mystery. Employees have acquired it.

6.2. Discussion based on Quantitative Studies

Very few research papers are available in the context of on-going terrorism. The research on ongoing terrorism context is carried mostly on Israel, which supports the existence of terrorism stress and it is prevalent in that population (Toker et al., 2015). Whereas, the nature of context faced by employees in the current data samples differed from earlier research studies. Drawing on three distinct theoretical frameworks, i.e. Stress theory, ERI framework COR theory, this study examined the terrorism stress employee face working in terrorism-ridden areas. Prior research has not paid proper attention to investigating the effects of on-going terrorism on employee behavior at work, mainly, on organizational commitment, job burnout and psychological wellbeing of employees in terrorism-ridden areas. Here, the results are discussed in combination with the nearest possible research done in other research contexts.

The findings in the first study suggest that exposure to terror create a mismatch between employee demands and resources. Drawing on Stress theory, this is the earliest study, I know in the context of terrorism-ridden areas that examine rumination role as a mediator. Furthermore, fear of terror has a significant positive impact on employee psychology (rumination) and this, in

turn, leads to adverse effects on employee organizational commitment, particularly for employees exposed to terrorist attacks. Comparing terrorism stress in comparison to other contemporary studies; in this research stress of terrorism has pervasive influence or physical effect on employees. On average fear of terror stress in this research is higher than ($x=2.06$) mean in the overall sample, while in workforce data on average it is less than ($x=1.70$) mean (Toker et al., 2015). Rumination mean score is ($x=2.76$) and it has a positive relationship with fear of terror, while in the same study Insomnia (problem in sleeping), it is less than ($x=2.50$) mean. Hence, stress-induced from exposure to terror is higher in this research study when comparing to other data (Hobfoll et al., 2007). Moreover, organizational support mean score in the current study is ($x=3.08$), while it is above ($x=3.7$) in the above study. Organization support role, in general, is limited for employees working in this context which is not surprising in both settings according to the Terrorism Theory (Pyszczynski et al., 2003).

In the second study, we used the effort-reward imbalance (ERI) framework. In this study, effort-reward imbalance (work related stressor) leads to adverse health effects on employee job burnout working in terrorism-ridden context. This study is first in its way that used ‘situation to terrorism’ as a moderator. The results showed that job stress conceived from effort-reward imbalance mean score is ($x=3.4$), while in other contexts it is just contrary (Reichel & Neumann, 1993). Consequently, results showed in the current study that the effect of effort-reward imbalance was stronger than that of terrorism stress in comparing to the first study in this work. In this regard, the qualitative study aids in assessing the interpretation of employees why the effects of terrorism stress were smaller in percentage comparing that of job stress in terms of impact. Employees responded their viewpoint as; we know terrorism is beyond the control of anyone, the things that matter we should have flexibility in timing at offices, employers must

provide security to employees, provide guarded transportation and employers should assign fewer job targets in times of terrorism waves. We know from the effort-reward imbalance framework that when there are hindrances in work time, responsibilities, work roles, etc. it creates imbalance resultantly creates job stress, which we have in the second quantitative study (Chapter 5, EGOS 2019). While we have interesting results on the role of moderating and mediating effects of sensitivity to terrorism and organizational injustice. Overall organizational injustice mediates the relationship between ERI and job burnout of employees, and this is the reason job stress is stronger in the study context.

In the third study, we used the COR theory (Hobfoll, 1988). Sensitivity to terrorism, in this case, deplete employee psychological wellbeing while psychological resilience mediates the relationship. The situation of working under discontinuous terrorism events is indeed resourced draining for employees. So, terrorism stressor has an inverse impact on employee psychological wellbeing. This process supplies some added psychological resources.

Overall, above findings are consistent with the general terror management theory perspective (Greenberg et al., 1986), which supports the notion that death-related stimuli (represented in our study by fear of terror and sensitivity to terror) are related to adverse outcomes working in terrorism-ridden areas. Now, I discuss findings one by one of the main variables used in this study.

6.3. Discussion based on Main Variables

6.3.1. Organization Commitment

We predicted that fear of terror had a negative effect on employee commitment, and we have interesting results concerning to employee commitment. Mean score of the organization commitment is ($\bar{x}=3.9$), depicting the level of employee organizational commitment with their organizations and their bondage. The explanations for higher mean score are that employees understand the goals of the organization and in return working for it. The causes for employees who are working in terrorism-ridden areas either have ‘no choice’ to move to another safe area or they are working because of their ‘own choice.’

In case of ‘no choice’ situation, employees have more terrorism stress, and therefore their organization commitment is affected as discussed in first quantitative study. While in the latter case, an employee who stays ‘by choice’ have more psychological resources, and they want to stay with their family members and colleagues. They do not want to leave their native land at any cost. Other explanations or reasons about this situation; there are not abundant options for new jobs, economic indicators are not progressing and when job security is also a big problem especially when a lot of private sectors firms closed their operations operating in these settings. Furthermore, employees working in dangerous areas like to have a purpose, acquaintance and control (Rond & Lok, 2016). Eventually, it gives employees a sense of commitment experience with the organization in dangerous settings. Hence, these are logical arguments for having a moderate organizational commitment for employees working in terrorism-ridden areas.

6.3.2. Burnout

Results about the relationship between effort-reward imbalance and three dimensions of burnout are interesting. We predicted that effort-reward imbalance had a significant positive effect on employee burnout. It confirmed in the study that job stress in the context of working in dangerous areas has severe consequences in the shape of job stress which leads onward to job burnout. It shows that employees are suffering from exhaustion, where one's thoughts and feelings do not belong to oneself and a lack of interest in things working in dangerous areas. The mean scores in the second study depict three burnout dimensions falls between ($x=2.5$ to $x=2.6$), these scores are higher than studies conducted in other context ($x=1.97$) (Brummelhuis et al., 2010; Toker et al., 2015). Consequently, mean score of burnout dimensions has an impact on employees, and they do experience job stress, and it is continuously recurring due to terrorism-ridden context. In these situations, efforts-rewards imbalance have a burnout effect on employees, and it has an onward impact on health and wellbeing on them.

6.3.3. Role of Rumination

We argued rumination will mediate the direct relationship between fear of terror and employee commitment. Findings of the role of rumination are holding attention, these hypotheses results supported by data. So, employees' habit of negative thinking causes trouble, and it damages or weakens their physical and cognitive resources. Due to the complex working context (terrorism), they continuously think about terrorism and tell themselves how sad things can happen. Hence, fear of terror has a positive relationship with rumination working in terrorism-ridden areas. The rumination mean score ($x=2.76$) showed that employees on average are experiencing and have a habit of rumination and this is the reason employees have minimal

contact with their colleagues — less contact with others are creating rumination in their minds working there. As a consequence, fear of terror effect is far above in this study.

6.3.4. Role of Organizational Injustice

We argued organizational injustice will mediate the direct relationship between effort-reward imbalance and facets of job burnout. While the results of this study related to organizational injustice are interesting. The understanding between the ERI model and research on justice had been mentioned previously by other authors (Kivimäki et al., 2007; Topa et al., 2016). The organizational injustice mean score ($x=3.27$) showed that there lies injustice within an organization. It showed that on average employees perceive that organization has no fair and uniform policies for their employees. According to the ERI framework, uncertainty at terrorism-ridden areas already create a disturbance, and it makes more difficult for employees to work, hence employees in this context looking for fair and uniform organizational policies for all regardless of their employment status and class. Failure to this may increase their exhaustion, depersonalization with the organization.

6.3.5. Role of Resilience

We argued psychological resilience will mediate the direct relationship between sensitivity to terrorism and employee wellbeing. The findings of the part of resilience are helpful and interesting. Mean score of the psychological resilience is ($x=3.29$), which is greater, showing that employees are protecting themselves from the possibility of harmful effects of terrorism stress working in that context. In this regard, the mean score showed that resilience does exist among employees and they develop psychological resources in the face of continuous adversaries which

keep them calm and to deal with stressful situations effectively. A quantitative study in this context shows that employees having psychological resilience power can recover quickly, can back to normal position after the damaging effect of terrorism stress.

6.3.6. Role of Organizational Support

We argued organizational support will moderate the direct relationship between fear of terror and employee commitment, The result of perceived organizational support mean score in the current study is ($x=3.08$), while it is above ($x=3.7$) in other contexts (Toker et al., 2015). In general, employees perceive that their employers' must realize the fact of terrorism which is real, and its impact on the employee wellbeing. Employers supply them resources which are helpful to face the adversaries in tough times. They expect wages and medical benefits in tough times. This is the explanation their mean score is above ($x=3.0$) in both contexts. Organization support role, in general, is limited for employees working in both settings which is not surprising, according to Terror Management Theory (Pyszczynski et al., 2003). An employee in terrorism times expects their employers to support them. They expect enhanced physical security and anti-stress programs for them. In general, these support programs reciprocate to organizational performance.

6.4. Contribution to Three Stress Theoretical Frameworks

6.4.1. Stress Theory

In the first quantitative study (Chapter 04, AOM 2018), we used stress theory. This research contributed to the theory, by explaining the fear of terror, job stressor and their effects on employees working in terrorism-ridden contexts. Research on Stress theory from a terrorism

perspective is exceptional and not investigated much. In this regard, the first quantitative study (Chapter 04, AOM Proceedings 2018 Paper) supplies added insights on stress theory and its usefulness in a non-western context. It combines fear of terror, rumination, organizational support and organizational commitment of employees. Hence, the theory extended to understand the effects of terrorism on employees working in terrorism-ridden areas. It does help to follow work stressors and their consequences. Thus, this study contributes to Stress theory and shows its importance in understanding the experiences of employees working in terrorism-ridden areas.

6.4.2. Effort-Reward Imbalance Framework

In the second quantitative study (Chapter 05, EGOS 2019), we applied the ERI framework. This research contributed to the structure, by explaining job stressor and their effects on job burnout of employees working in terrorism-ridden contexts. Research on ERI framework from a terrorism perspective is exceptional and not investigated yet. In this regard, the second quantitative study adds insights on ERI framework and its usefulness in a non-western context. It combines effort-reward imbalance, organization injustice, sensitivity to terrorism and facets of burnout. Hence, the framework extended, it helps to understand for job stressors and their effects for employees working in terrorism-ridden context. The study also adds to organizational injustice theory which can lead to resource loss and have a further impact on burnout.

6.4.3. Conservation Of Resources Theory

In the third study (Chapter 06, EURAM 2019), we used the COR theory. This research contributed to the theory, by explaining sensitivity to terrorism, psychological resilience, and their effect on employee's psychological wellbeing. Research on COR theory from terrorism

perspective is mostly carried out in the western context, while this research is carried out in a non-western context. It adds value to the existing literature on COR theory. The theory extended to comprehend the effects of terrorism on employees working in terrorism-ridden areas. It helps to understand work stressors and their impact on employee wellbeing. The study also adds to COR which uses psychological resilience, which can lead to resource gains and have positive prosperity. Thus, this study contributes to the COR theory and shows its importance in understanding the experiences of employees working in terrorism-ridden areas.

6.5. Some Practical Applications

6.5.1. Understanding of Stressors for Employees Working in Terrorist Hit Regions

This study helps educational institutes and universities regarding the terrorism and job stressors and their effects on employee organizational commitment, burnout and wellbeing. The employees are suffering from both (terrorism and job) stressors working in terrorism-ridden areas which have a specific connection with job responsibilities, and it must be addressed to sort them out. Institutions must take into consideration that working in terrorism-ridden areas carries stress, so less work-related tasks should be assigned to them. It has minimum work stress leads to lower adverse effects. More counseling should be provided in other to deal with terrorism stress. The terrorism stress and job stress may lead to lower health and wellbeing among employees, which have onward effects on employee organizational commitment, performance, and burnout (Brooks et al., 2018; Cooper & Kelly, 2013; Freedy & Hobfoll, 2017).

6.5.2. Making a Favorable Work Situation

The institute's heads need to work closely with employees to see contextual factors as well as work-related factors causing stress to them. This investigation will lead to offering employees flexible working hours, including added benefits in the case of salaries and benefits working in terrorism-ridden areas. Fringe benefits and work arrangements as per the contextual circumstances have a positive association with the health and wellbeing of employees (Galinha & Pais-Ribeiro, 2011; Lee, 2018). Institute premises should be a top priority along with the employees working there. It would be helpful for the security of both the institute and employees who are working in those contexts.

6.5.3. Enhanced Security for Employees and Employers

The results of the study suggest that firms managing a business in terrorism-ridden areas can help employees by assisting them both inside and outside the educational institutes. Security of office premises and staff can be expensive especially operating in dangerous areas. Consequently, surveillance cameras along with sensors must be installed outside the premises, and inside the institute. The security such as armed guards, vehicle and full body scanner devices, may give workers some peacefulness and they can concentrate on their work. On the other side, it seems reasonable which we have from employees interviews that ongoing inspection and body or vehicle scanning may annoy or make them angry because of the time associated with it. This time is considered by them as a barrier to their progress. Hence, the institutes should sort it out which security system is working out and to devise strategies that develop friendly security investigation that fosters productivity and less irritation for employees.

6.5.4. Psychological Interventions

Resilience is a psychological resource and can buffer adverse stressor effects. This draws special attention that institutes must provide training programs to employees that enhance their resilience power. These programs are useful and tested in various contexts with satisfactory results (Luthans & Frey, 2017). This would positively increase health and wellbeing on employees with enhanced job commitment and other outcomes. In the same study, Luthans and Frey (2017) introduced a specific program such as micro intervention with the objective to improve psychological resilience among employees. This may have a positive effect on employee outcomes and in turn, help the organization. These micro intervention programs are essential for employees working in terrorism-ridden areas.

6.5.5. Similar Contexts

Similar studies can be carried out in regions affected by terrorism such as Iraq, Afghanistan, India and other terrorism hit countries where employees carry on with their everyday lives bearing the stress of fear, threats, kidnapping, and exposure to terrorism. This research can also be extended to the people who are possibly on the verge of being attacked or exposed such as minority category, religious category, and race or ethnic category. These categories of people experience distress in their everyday life, and it appears worst in quality for them. The psychological impact of ongoing terrorism on these categories has mostly been ignored, even as it has silently begun to shape the lives of generations. So, these classes could be addressed in future studies in the context of on-going terrorism.

6.5.6. Method

Managing people in a workplace is a complex phenomenon, particularly in the risky areas. In this regard, human resource division takes great care to align human resources with organizational goals so that they achieve the collective set goals of the organization. In order to deal effectively with human resources at work in these contexts, future studies could involve various groups of employees working, where terrorism stress and job stress data could be obtained over some time. The time depends upon the background and aim of the study. We do have research available on a single terrorist incident such as 9/11, but not enough in the sense of two waves data. So, data could be gathered at two waves or more to see accuracy in the results. Systematic observation of the similarities and differences should be focused in these studies. It is critical for the organizations operating in these contexts is to develop employee's skills, motivate them so that their commitment remains at high level and they contribute towards organizations set goals. Moreover, the current study variables used in this research could be re-used in other contexts to see the comparative findings in the organizations with fear of terror, rumination, organizational commitment, and other variables used in the entire work.

6.6. Limitations of the Study

The results of the study have certain limitations related to research design, methods, and lack of prior studies.

First, it was noticeably clear the notion of risk associated with collecting data in this study. Researcher traveled to those affected places, has face to face conversation with respondents for receiving data from the educational institutes of Quetta and Peshawar. Due to extensive traveling

to far-flung areas and associated danger with it, the researcher decided to use convenience method to collect data for the third and fourth quantitative studies. It is a limitation. Majority of the employees have lack of knowledge or unaware of latest tools of online forms. So, it was not so easy to have data from these respondents, and a low response was expected in the studies.

Second, the data used was cross-sectional in nature and findings are established on inferences (Tabachnick et al., 2007). The face to face conversations conducted with the employees was held at the beginning of the study and once at a time. As per the aim of the whole review, it addresses the effects of terrorism stress, it would be more effective if the data collected separately at various periods. This would have drawn evident attention and supplied consistent behavior of employee data. More data over a prolonged time is required in this regard, it will help strengthen the findings.

Third, self-reporting and single data sources also fall in the limitations (Podsakoff et al., 2012). The face to face conversation with employees has a deep understanding about what they feel working in terrorism-ridden areas. Other options could be used from which terrorism stress can be obtained such as; observation or experiment method. This is also a limitation. While, moral integrity followed, as per the aim all data treated with secrecy.

Fourth, limitations in this research design is the collection of data from two cities (Quetta and Peshawar). We have four studies in this thesis. In the first qualitative study, we have (22) respondents, for the second study we have (268) sample size, for the third and fourth study we have (432) data. Above data samples represent two cities of same nature that represent same context. The representation of two cities can be an issue because it does not provide higher sample. In this regard, confidence in the results comes with considerable size of data (Field,

2016). Moreover, all studies conducted in a terrorism context has the same problem (Bader & Berg, 2013; Soomro et al., 2018). Hence, bigger sample of data could provide more confidence in the findings.

Fifth, To focus on employees suffering from stress, it was necessary to have snowball sampling in this context. While it is a non-probability method, indicated faults and criticized in prior studies (Heckathorn, 2011). According to the study context and purpose, it was a suitable technique, because it needs a lot of care to question and have a face to conversations with those affected employees working in those areas. Furthermore, it was necessary to have purposive sampling in this regard. However, this is treated as a limitation.

Sixth, as mentioned earlier, this study has reason to carry on. It gives a setting to study how terrorism influences on employees working in terrorism-ridden areas. Accordingly, very few prior studies were available on this contextual setting and the included variable, it serves as a big limitation in this context. Pointing this limitation means that if we have not enough prior studies meant we have not enough literature on the context which leads to lower choices of research methods on it. Hence, future studies consider this and address this limitation.

6.7. Future Research Direction

The limitations of this research open several new avenues for future researchers to extend the findings. For instance, this study focused on only terrorism stress and job stress separately. Future studies might address same contextual factors such as; ethnic terrorism, minority issues, work family relationship, organizational culture, job flexibility and autonomy and relationship with supervisor. All these factors influence employees' work behaviors. In a study, Bader et, al.

(2014) explained various factors and various outcomes influencing employee performance in dangerous areas. We suggest future studies could address other factors in this regard.

This study examined the moderating effects of organizational support and sensitivity to terrorism; however, future research could address some other moderating variables at the individual level (e.g. culture), concerning the context (cultural affects, available job opportunities). This study used sample of participants from educational institutes. Future studies could address public, private sector, non-governmental employees to see the generalizability of the findings of this study. We strongly recommend future researchers to replicate the findings of our study using longitudinal research design because longitudinal data would help the researchers to explain causality among the various constructs of this study.

Conclusion

Research on terrorism as a stressor is exceptional and not studied in organisational studies. We need more research to explore this theme for employees working in on-going risky areas. This study is an attempt to bring researchers and academia up to date with new concepts in the field of organizational studies. It is a thought-provoking topic full of risks. While, this theme needs alliance to understand other subjects for better understandings. With growing threats of terrorism events, there are greater chances that it may affect societies, employees and business at large, but the nature of those effects are mostly unknown. There are significant calls for research focusing on terrorism. The last year conference held at the UN (June 2018) focused on “Strengthening International Cooperation to Combat the Evolving Threat of Terrorism”, it called scholars to present and discuss their research on how to combat dangers and risks associated with terrorism threats and its consequences. Henceforth, in the wake of current threats

happening around the world (i.e. Christ Church and Sri Lanka), it is thus pivotal to focus research in this area for more clarity.

This research aims to explore and understand terrorism as a stressor. In this regard, the main question of the research was “to understand terrorism and job stressors, and their influence on employee outcomes.” Two cities of Pakistan that experienced incidents serve the purpose and supplied a set of circumstances that make it possible to carry on this research. Hence, the study first explored the nature of terrorism and job stressors and their influence on employee behaviors (Chapter 2, Literature Review). In doing so it highlighted the most salient employee outcomes in the context. We emphasized the importance of stress and indicated the prevalence of terrorism stress in the employees (Chapter 3, Qualitative study). This provided confidence and direction to move forward for quantitatively studies (Chapter 4, Chapter 5 and Chapter 6 respectively). In these studies we test the relationship of terrorism stress, job stress with various employee outcomes.

Moreover, the first empirical study (Chapter 4, AOM 2018 paper) was based on the findings from the qualitative study (Chapter 3, Qualitative study). This study tests the relationships of terrorism stress with employee organizational commitment and determined the mediating role of rumination and moderating role of organizational support. Interestingly, the levels of terrorism stress was found to be higher than in previous studies. Rumination increases the harmful effects of the stressors on employee organizational commitment. Organizational support moderates and buffer the adverse impact of terrorism stress. While, rumination role as a mediator used for the first time in the study context.

The second quantitative study (Chapter 5, EGOS 2019) tests the relationships of job stress with job burnout of employees and determined the mediating role of organizational injustice and the moderating part of sensitivity to terrorism. Findings significantly supported the proposed hypotheses on the levels of job stress. While, organizational injustice has inverse effects of the stressors on employee burnout. Sensitivity to terrorism moderate and increases influence of the terrorism stress and used first time in the study context. The third quantitative study (Chapter 6, EURAM 2019) tests the relationships of terrorism stress with employee psychological wellbeing and determined the mediating role of psychological resilience. Interestingly, the levels of terrorism stress was found to be higher for female employees than male employees. It is the first study that in the context which analyzed gender.

This research contributed to the existing theories on human resource management and organizational studies, specifically on stress. For instance, we use three various stress frameworks i.e. Stress framework, ERI framework and COR framework, by explaining the terrorism stress, job stress and their influence on employees working in terrorism-ridden contexts. To the best of knowledge, no similar studies have been incorporated that are studied in this work for employees working in terrorism-ridden context.

The study makes several significant contributions to the existing literature on Stress theory, ERI framework, and COR theory. The study also makes several contributions on job stress and the organizational behavior, by providing findings from terrorism-ridden context. Overall, this thesis provides managers a lens to understand the stress employees experience in the circumstances. Beyond the context of this study, these findings may help people working in other similar contexts or affected countries. Broadly speaking, it also points out that international

organizations, governments and communities of other countries need to think clearly and devise strategies to stop such incidents to avoid stress for the employee, organizations, and the communities at large.

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**Appendix I: [tous] RAPPEL: réunions d'information "sécurité -
sûreté" le 11 et 18 avril 2018**

Boîte de réception

BERLAND Yvon <yvon.berland@univ-amu.fr>

jeu. 5 avr. 2018 08:59

A tous
RAPPEL

Mesdames, Messieurs,

Dans un contexte de menace terroriste amplifiée par les attentats de 2015 et 2016, l'Université, comme de nombreuses autres organisations de service public, pourrait être visée par des actions violentes ou des attaques terroristes.

AMU a d'ores et déjà renforcé ses dispositifs en matière de sécurité et de sûreté et définit actuellement un plan pluriannuel d'adaptation de ses sites face à ce risque, qui intégrera des nouveaux équipements et procédures, des formations des personnels...

Néanmoins, au-delà de toutes les mesures qu'AMU pourra mettre en œuvre, la sûreté de toutes et tous repose également sur la vigilance, l'implication et la sensibilisation de chacune et chacun d'entre nous.

C'est pourquoi deux séminaires d'informations spécifiquement dédiés à notre université seront organisés les :

- **mercredi 11 avril 2018 de 09H30 à 12H00 sur le campus Timone à Marseille (faculté de médecine- amphithéâtre Toga),**
- **mercredi 18 avril 2018 de 09H30 à 12H00 sur le campus d'Aix-en-Provence (faculté de droit et de science politique- amphithéâtre David) .**

Programme :

09h30 : intervention d'Yvon Berland, Président d'Aix-Marseille Université et d'Olivier de Mazières, Préfet de police des Bouches du Rhône.

chaque séquence est suivie d'échange avec la salle

10h00 : intervention de la Direction départementale de la sécurité publique des Bouches du Rhône : « *Des solutions pour limiter le risque d'attentat* »

10h30 : Intervention de l'unité Recherche, Assistance, Intervention, Dissuasion (RAID) de la

Police nationale : « *Situation de crise dans une salle de spectacle : Tragique Soirée du Bataclan* »

11h00 : Intervention du médecin de l'unité médicale d'intervention de l'Antenne Raid Marseille et du directeur du SMUR du Bataillon de Marins-Pompiers de Marseille : « *Organisation de la prise en charge initiale de multiples victimes* »

11h30 : intervention de la Direction générale de la sécurité intérieure (DGSJ): « *La radicalisation* »

12h00 : fin du séminaire

Pour des raisons d'organisation, **je vous remercie de vous inscrire par retour de mail à protocole@univ-amu.fr en précisant la date et le lieu retenus.**

Cordialement

Yvon Berland – *Président d'Aix-Marseille Université*

Aix-Marseille Université – Jardin du Pharo - 58 BVD Charles Livon - 13007 Marseille

Tél: 04 913 96 501

Site : <http://www.univ-amu.fr> - Email : yvon.berland@univ-amu.fr

Afin de respecter l'environnement, merci de n'imprimer cet email que si nécessaire.

Appendix II Survey Questionnaire for Study 1

Dear Participant,

I invite you to take part in this research study entitled; “Exposure to terror and employee behavior, working in terrorism-ridden areas”. I am a PhD student at IAE Aix-Marseille Graduate School of Management, France. The study investigates factors affecting individual attitude working in risky areas. In this regard, please record your responses as it uniquely suits you. There are no risks associated in taking part this research study. Moreover, your responses will remain confidential and anonymous. No one other than the researcher will know your individual responses. Overall, it will take 10-12 minutes to complete this questionnaire.

If you have any further questions, please do not hesitate to contact me: Shuaib Ahmed, PhD student at my email ID: Shuaib.ahmed@iae-aix.com

Thank you for your cooperation.

Shuaib Ahmed
Ph.D. student
IAE Aix-Marseille Graduate School of Management
Aix-en-Provence

Please indicate to what extent you feel any course of fear or threat of terrorism during working hours or in traveling time between home and office.	Never	Very rarely	Rarely	Frequently	Very frequently
Overall to what extent you fear of being exposed to terrorist attacks					
Overall to what extent you fear for personal safety					
Overall to what extent you have tension in crowded places					
Please mark the number that best describes your opinion relating to the following items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Overall the organization values my contribution to its well-being.					
Overall the organization really cares about my well-being.					
I feel respected by top management for my contributions to company success					
The organization shows very little concern for me.					
I am quite proud to be able to tell people who it is I work for.					
I sometimes want to leave this employment for good.					
I am not willing to put myself out just to help organization.					
Even if the firm were not doing too well financially, I would be reluctant to change to another employer.					
I fell myself to be part of the organization					
In my work I like to feel I am making some effort, not just for myself but for the organization as well.					
The offer of a bit more money with another employer would not seriously make me think of changing my job.					
I would not recommend a close friend to join our staff					
To know that my own work had contribute to the good of the organization would please me.					

The following questions concern all the thoughts, memories, and images related to terrorist-incidents you are surrounded by at your workplaces or at home. Please mark that best describes your feelings.	Completely Indistinct 1	2	3	4	Completely Clear 5
Overall, how strong, vivid, or clear are these thoughts?					
Overall, to what extent these thoughts captivate your attention?					
Overall, how often did these thoughts disrupt your ongoing activity?					
Overall, to what extent did these thoughts suddenly enter your mind?					
How difficult was it to dismiss these thoughts?					
When you had these thoughts, did you try to actively dismiss them as soon as they appeared in your mind?					

Please answer the following:

- Job title:
- Sex:
- Age:
- Education:
- Experience:
- Marital status:

Thank you for your participation

Appendix III: Survey Questionnaire for Study 2

Dear Participant,

I invite you to take part in this research study entitled Employee stress and organizational injustice working in risky areas. I am a PhD student at IAE Aix-Marseille Graduate School of Management, France. The study investigates factors affecting individual behavior and its onward effect on job performance and employee wellbeing. In this regard, please record your responses as it uniquely suits you. There are no risks associated in taking part this research. Moreover, your responses will remain confidential and anonymous. So, no one other than the researcher will know your individual responses. It will take 12-15 minutes to complete this questionnaire.

If you have any further questions, please do not hesitate to contact me: Shuaib Ahmed, (PhD student) at my email ID: Shuaib.ahmed@iae-aix.com

Thank you for your cooperation.

Shuaib Ahmed
Ph.D. student
IAE Aix-Marseille Graduate School of Management
Aix-en-Provence

Please mark the number that best describes your opinion relating to the following items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I have constant time pressure due to a heavy workload.					
I have many interruptions and disturbances in my job.					
I have a lot of responsibility in my job.					
I am often pressured to work overtime.					
My job is physically demanding.					
Over the past few years, my job has become more demanding in office					
I receive the respect I deserve from my supervisors.					
receive the respect I deserve from my colleagues.					
I experience adequate support in difficult situations.					
I am treated unfairly at work.					
Considering all my efforts and achievements, I receive the respect and prestige I deserve at work.					
My job promotion prospects are poor.					
My current occupational position adequately reflects my education and training.					
Considering all my efforts and achievements, my work prospects are adequate.					
Considering all my efforts and achievements, my salary/income is adequate					
I have experienced, or I expect to experience an undesirable change in my work situation.					
My job security is poor.					
I seem to lose enthusiasm for work whenever I get news of another bomb blast					
I sometimes find it difficult to perform my job well due to the mood created by the ethnic conflict					

I feel more tense at work when there is a fresh incident related to the ethnic conflict					
I feel emotionally drained from my work					
I feel used up at the end of workday					
I feel tired when I get up in the morning and have to face another day on the job					
Working all day is really a strain for me					
I can effectively solve my problem that arise in work					
I feel burned out from my work.					
I feel I am making an effective contribution to what this organization does.					
I have become less interested in my work since I started this job					
I have become less enthusiastic about my work					
In my opinion, I am good at my job					
I feel exhilarated when I accomplish something at work					
I have accomplished many worthwhile things in the job					
I just want to do my job and not be bothered					
I doubt the significance of my work					
I have become more cynical about whether my work contributes any thing					
At my work, I feel confident that I am effective at giving things done					
Overall, I'm treated fairly by my organization					
In general, I can count on this organization to be fair					
In general, the treatment I receive around here is fair					
Usually, the way things work in this organization are not fair					

For the most part, this organization treat its employees fairly					
Most of the people who work here would say they are often treated unfairly					

Please answer the following:

- Job title:
- Sex:
- Age:
- Education:
- Experience:
- Marital status:

Thank you for your participation

Appendix IV: Survey Questionnaire for Study 3

Dear Participant,

I invite you to take part in the gender research study entitled Employee sensitivity and the role of resilience working in terrorism-ridden areas. I am a Ph.D. student at IAE Aix-Marseille Graduate School of Management, France. The study investigates factors affecting male and female health and wellbeing, working in terrorism-ridden areas. Please record your responses as it uniquely suits you. There are no risks associated with taking part in this research.

Moreover, your answers will remain confidential and anonymous. No one other than the researcher will know your responses. It will take 10-15 minutes to complete this questionnaire. If you have any further questions, please do not hesitate to contact me: Shuaib Ahmed, Ph.D. student

Shuaib.ahmed@iae-aix.com

Thank you for your cooperation.

Shuaib Ahmed
Ph.D. student
IAE Aix-Marseille Graduate School of Management
Aix-en-Provence

Please mark the number that best describes your opinion relating to the following items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I seem to lose enthusiasm for work whenever I get news of another bomb blast					
I sometimes find it difficult to perform my job well due to the mood created by the ethnic conflict					
I feel tenser at work when there is a fresh incident related to the ethnic conflict					
I usually manage one way or another					
I feel proud that I have accomplished things in life.					
I usually take things in stride					
I am friends with myself					
I feel that I can handle many things at a time					
I am determined					
I can get through difficult times because I have experienced difficult before					
I have self-discipline					
I keep interested in things					
I can usually find something to laugh about					
My belief in myself gets me through hard times					
In an emergency, I'm someone people can generally rely on					
My life has meaning					
When I am in a difficult situation, I can usually find my way out of it.					
I've been feeling optimistic about the future					
I've been feeling useful					

I've been feeling relaxed					
I've been dealing with problems well					
I've been thinking clearly					
I've been feeling close to other people					
I've been able to make up my mind about things					

Please answer the following:

- Job title:
- Sex:
- Age:
- Education:
- Experience:
- Marital status:

Thank you for your participation