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TECHNOLOGY, ISLAMABAD



**The Mental Edge in Pakistani
Policing: Exploring the Interplay
between Strained Cognitive
Resources, Implicit Bias and
Procedural Justice**

by

Taqdees Fatima

A thesis submitted in partial fulfillment for the
degree of Master of Science

in the

Faculty of Management & Social Sciences
Department of Psychology

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This thesis is dedicated to

”My Parents”

for being source of motivation, strength and love



CERTIFICATE OF APPROVAL

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(Taqdees Fatima)

Abstract

Policing stands as the backbone of any societal structure, however its relentless demands and high stress make it one of the toughest working environments around the globe. In a country like Pakistan, the police department operates under persistent strain due to its unique deep-rooted systemic challenges and professional stressors. This results in significant toll on police personnel physical, psychological, cognitive, and behavioral attributes. However, research on Pakistani police officers perspectives remains scarce leaving a critical gap in the literature. Therefore, this study aims to explore the perception of police personnel about interplay of their stressful job environment, cognitive resources, implicit bias and procedural justice through in depth qualitative interviews. The insight was obtained from 15 police personnel of Islamabad through convenient sampling. The data was than analysed using inductive thematic analysis and a total of seven major themes were extracted. The themes include dynamics of job, cognitive resources and implicit bias, interplay between cognitive resources, implicit bias, and procedural justice, coping, and organizational improvements. The time constraints from participants end impose challenges during the study. However, this study will help to provide policy changes within the system to cultivate more effective, impartial and community centered police force . This is done by enhancing and protecting the psychological and cognitive resources of active agent of Pakistani CJS.

Keywords: Islamabad Police Officers, Job Characteristics, Neutrality, Trust, Judgement.

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Abbreviations

CJS Criminal Justice System

EST Ecological System Theor

Chapter 1

Introduction

Police officers play a crucial role in maintaining civil society by upholding societal peace and harmony, serving as guardian of social stability (1; 2). However, this vital role comes with immense challenges, making policing one of the most demanding professions (3; 4). Unlike other occupations, police personnel operate in a high risk environment characterized by continuous exposure to danger, uncertainty and violent encounters (5).

The working environment of police personnel is considered as highly stressful due to multiple contributing factors. These include continuous exposure to violence, first hand contact with victims, excessive workload, issues of management and lack of resources (human, financial and technological resource) (6), threat to life, emotional exhaustion, aggression from citizens (7), lack of trust from society and political pressure (8). Studies indicate that policing ranks among the most stressful occupation (9) with stress being an inherent by-product of the job (10). The stress along with unpredictability and constant challenges further intensify the psychological strain.

The cumulative stress and uncertainty leads to severe physical, psychological, behavioural and cognitive toll (11; 12; 13). Research evidence showed that continuous exposure to prolonged stress and uncertainty lead to increased risk of mental health concerns (14). This also has a negative effect on quality of work and the organization (15). Additionally, the uncertain and challenging situations influence

cognitive flexibility (16) and accelerate depletion of cognitive resources (17). The high demands, ambiguity and uncertainty of job environment strain cognitive resources limiting capacity to perform other tasks effectively (18).

When there is strain on cognitive resources the individuals are more likely to rely on mental shortcuts such as implicit biases (19; 20; 21). This has profound implications as implicit bias can shape behaviours and lead to discriminating attitudes (22). Existing research evidence highlighted the prevalence of implicit bias across various professions including medicine (23), law (24), education (25) and policing (26; 27). Within law enforcement such as police implicit bias influence perceptions, decision making and interaction with public, often leading to unfair treatment (28; 29). Consequently, when officers make decision based on implicit bias the principles of procedural justice; which emphasize fairness, transparency and respect are compromised (30)

Procedural justice plays a fundamental role in shaping public perception of police legitimacy (31). When policing practices are perceived as fair and transparent law enforcement agencies such as police gain public trust and legitimacy(32). However, in Pakistan police personnel's are often viewed as lacking legitimacy contributing to widespread perception of unfairness and corruption (33) . Research on policing in Pakistani primarily focuses on systemic issues such as organizational inefficiencies, institutional disconnect, political challenges, corruption and structural constraints (34; 35). While these studies highlight organizational issues, they often overlook the individual level challenges faced by police personnel particularly those related to cognitive functioning and decision making.

Pakistan's working environment is inherently stressful due to factors such as excessive workload and lack of resources (36) and these challenges are more severe in police department. There are various factors that contributed to the alarming situation of Pakistani police department such as nature of working environment and variety of task performed by police officers. These tasks include providing security, maintaining law and order, enforcing law, providing immediate response to disaster and performing routine duties at their work place (37). The failure

of policy makers to modernize the police force in response to the evolving security needs also contributed to difficult working environment (37). In addition to all these factors the lack of organizational support leads to perception of police being unjust, biased, untrained and corrupt organization (38). These systemic challenges combined with cognitive strain and environmental pressures undermine procedural justice further diminishing the ineffectiveness of law enforcement (33). Despite the growing concerns regarding police department in Pakistan research on police sector is scarce (37) particularly related to cognitive and psychological challenges despite its impact (35). Whenever dynamics of Pakistani police is explored the major focus is on organizational dysfunctions and their institutional consequences rather than individual experiences of police personnel. However, individual's behaviour, development and decision making is profoundly influenced by their surrounding environmental systems (39). Thus, understanding the impact of the working environment of the Pakistani police on personnel's cognitive abilities and behaviour is critical.

Considering the challenges faced by Pakistani police officer and the worsening condition of police department the present study aims to explore the perception of police personnel regarding cognitive challenges they faced due to their working environment. Specifically this study investigates the interplay between work environment, strained cognitive resources, implicit bias and procedural justice within Pakistani police department. By focusing on the individual experiences of police personnel, this research contributes to the deeper understanding of how different environmental system of police personnel at workplace affects them.

1.1 Rationale

Policing is inherently stressful and demanding profession exposing officers to variety of occupational, organizational and personal stressors (40). It is widely regarded as one of the most distressing field due to its unpredictable and high risk nature (41; 42). Despite growing interest in job related distress the physical,

psychological and cognitive challenges among police personnel continue to increase at an alarming rate (43).

Police officers work in environment marked with high demands, uncertainty and distress all of which significantly influence their behaviours, emotions and cognitive functioning (44). The most critical cognitive challenges faced by officers are the depletion of cognitive resources which influence cognitive flexibility and decision making (45; 16). Research evidence indicates that the excessive load of tasks in policing tax cognitive resources leading to cognitive exhaustion and depletion of resources (46; 47)

Considering the unpredictable, high demanding and stressful nature of policing as profession, the cognitive challenges faced by police personnel are deeply rooted in their operational environment (48). This also affects their decision making abilities. Existing research evidence suggests that the distress and uncertainty negatively affect cognitive flexibility reinforcing biases and impairing the decision making abilities(49).The ineffective decision making results in ineffectiveness of police system. The consequences of compromised decision making are particularly concerning in Pakistan where ineffectiveness of policing is prominent concern.

Police in Pakistan is often perceived as untrustworthy institute due corruption, abusive behaviour and high headedness (50). The confidence on law enforcement has deteriorated as public is hopeless in effectiveness of police and overall CJS (51). Despite several research studies focused on exploring the systemic issues affecting police department of Pakistan (52; 53) limited attention has been given to contribution of these factors on the psychological and cognitive resources of police personnel. Previous research has predominantly focused on identification of systemic issues which results in significant stress in working environment of Pakistani police personnel. These include corruption, political pressure; injustice within system and lack of resources (54). These conditions further increase cognitive strain making police personnel more susceptible to the implicit biases. Existing research also indicated there is a linkage between the distress and uncertainty/ ambiguity of police environment with depletion of cognitive resources and increased reliance

on mental shortcuts such as implicit biases (19; 46). Additionally these biases negatively impact fairness and neutrality of policing, thus undermining procedural justice (49).

Pakistani police is frequently perceived as unjust due to frequent exhibition of compromised neutrality, respect, trust and undermining the voice of other party in day to day dealings (55). The policing called as stress group due to its environment and have high demands and ambiguity a contributor to negative behaviours of police personnel (56). However, the problems faced by police personnel at cognitive and behavioural level are often undermined area of research (57) especially in Pakistani context where research on police is scarce (37). Given the limited research on Pakistani policing, critical need to explore the impact of systemic issues and uncertain high demanding environment on an individual's cognitive resources biases and behaviors (procedural justice components).

This study aims to bridge that gap by exploring the perspective of police personnel regarding how a stressful police environment influence cognitive resources, depletion of cognitive resources, and contributes to the development of implicit biases ultimately shaping perceptions of procedural justice. By uncovering the psychological mechanisms underlying police decision-making, this research will provide valuable insights into the cognitive processes at play in policing. In doing so, it will offer an in-depth understanding that could inform the development of targeted interventions to improve decision-making and procedural fairness within law enforcement.

1.2 Theoretical Framework

Ecological system theory (EST) developed by Urie Bronfenbrenner was utilized as theoretical framework or model for understanding the interplay between different environmental systems of Pakistani police officer. EST is described as theory of human development that views an individual's development as interconnection of various aspects including the context, culture and historical influence (58). This

theoretical orientation focuses primarily on the role of different environmental systems on development and behaviour of individuals. The focus is on explaining development of an individual in a system of relationships that make up their environment (59).

According to EST, the environment is composed of various sized entities that are interrelated and interconnected (60; 61). These interrelated entities or systems contribute to the development of individuals thus providing an explanation of complexity of perception and attitude development (62). The closer the layer of system is to individual the more or greater influence they have on an individual's development (63) .

At the center of system is the individual with surrounding systems. These systems are known as microsystem, mesosystem, exosystem, macrosystem and chronosystem (60). In term of individual different characteristics such as age , personality, skills, trainings and special needs are considered. The immediate environmental system of an individual is the mesosystem. This is the most closest to an individual and is the comprised of the environment with which the individual have direct interaction (64). The next layer is the mesosystem. This system is based on connections and processes taking place between two or more settings containing the developing person. In other words it is simply “ a system of microsystem” . This system is created by linkages of different major components of the microsystem (58).

Exosystem is after the mesosystem of an individual and is comprised of environment with which the individuals are not directly interacted. Macrosystem is the overall culture and societal structure. Chronosystem focuses on the time element of attributes (63). This system is basically description of the evolution or development of external system with time. This period of time can be both short or long (65).

This theoretical orientation provided a holistic framework for variety of research areas. The original focus of this theory was early childhood development and family dynamics. However, with time the researchers and philosophers with varied

disciplinary interest start utilizing and evolving this theory. These varied disciplinary evolutions include its modification for utilization in sports psychology (66) and social marketing communication (67). EST also find its applications in analyzing resilience towards natural disasters especially in climate change context (68) and psychosocial and mental interventions for war affected children (8).

EST has strong ground for both psychology and public health areas (69). The model is also now adopted to be utilized in various other contexts including education, family policy and studies related to individuals with disability (70; 71; 72). This indicated that this theoretical orientation reflects adaptability to various different domains of human life and form its application in various different research areas. EST being part of system approaches focuses on consideration regarding the challenges an individual face and their intersection with issues at societal level resulting in informing “social imagination” . The EST also found its applications in terms of an individual working environment.

In a work environment the basic principle of EST remains that same i.e. an individual’s environment is a interconnection of different environmental systems that affect their behaviour, attitudes, perceptions and development. The modern work environment is evolving day by day and becoming complex resulting in influence on an individual behaviours, perceptions, emotions and cognition’s (73). Now a day’s workplace is becoming more occupied, uncertain, disconnected and dynamic (62). This continuous evolution in work environment and increase in complexity offers a new door for scholarly exploration.

EST helps to address determinants of working or organizational environment including the health, cultural and political dimensions that might impact the employees of that organization (73). The core characteristics of different environmental systems outlined by EST remain same when it is modified or evolved to explain a working environment.

As the central component is the individual therefore in a working environment characteristics such as age, skill set, training, personality traits, belongingness, interaction with co-workers and productivity is considered (62). The individual

here is in active state rather than the passive state which mean that the way in which a environmental system within work environment influence the individual there is presence of vice versa as well (73).

Microsystem is considered as most important part of ecological system. As this is the inner most layer of the environmental system it reflects more power to influence the individuals behaviour, development, perception, attitudes and wellbeing. One of the factors that make this environmental system powerful is the regular direct interaction of the individual with this system. In terms of microsystem of an employee it is the settings with the individual have direct contact such as the workplace and home (62). In this environmental system those settings are included in which an employee engage directly and form perceptions (60). This system comprises of colleagues and peers, supervisors or anyone with whom the individual interact regularly. The system would also comprise of the physical attributes of workplace which might influence the functioning of an individual (73). The next environmental layer in model is the mesosystem. This includes interaction between different components of the system. In terms of work environment mesosystem is correlation among two or more settings in which the employee have an active role (60). In a work environment it can be determinants such as cooperation and communication between the employee or colleagues, a balance between work and other life activities, communication with supervisors or management (73). Another impacting factor for mesosystem might be the philosophies and individual attributes that create connection between systems (62).

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Exosystem is placed after mesosystem in the ecological system model proposed by Bronfenbrenner. This system is less influential than microsystem but still plays a significant role in development of an individual experience. Exosystem is setting which the employee do not actively participate (60). Exosystem in a workplace is the general determinants that make up work environment. In terms of work environment this setting might comprise of cultural determinants of workplace, senior management of workplace, productivity demands and recruitment management system (73). Exosystem influence the microsystem of a workplace by aiding in development of support staff, workplace culture, and desired policy making (62). The next system is the Macrosystem that influence an individual. Macrosystem in work setting comprises of relevant public policies, political, social and cultural belief. This also comprises of determinants that have broadest influence on an individual such as society, government, culture and economics (73).

This system influence is not direct however it might develop the situations and contexts that the individual will be able to navigate. An individual might not be aware of the direct influence of this system on their experiences but this does not undermine their importance. This system also constitute of social and cultural norms (62). Chronosystem is a later addition to EST. This system focuses on the dynamic nature of an individual's environmental system over time (Bronfenbrenner, 1999, p. 20).

An individual's social networks, relationships and environment changes over time. This is also indicated at workplace of an individual. This follow the same phenomenon as the human beings develop and grow with time workplaces and organizations also grow and change (73). Chronosystem in work setting focuses on the factors such as turnover in management, changes in employees 'skills, shifts in job requirements and societal perceptions (62).

The preceding discussion highlighted the application and utilization of Ecological system theory in general human development domain along with applicability regarding development of an individual in work setting. This indicated that the conceptual framework of EST can also be utilized and extended to the setting or

working environment of police personnel. The police personnel have unique working environment and it influence the cognitive, behavioural, emotional and social development of its active ingredient- police personnel.

The figure gives graphical representation of different environmental system of police department work environment. The figure also highlighted the exploration of interplay of three major systems micro, meso and exosystem of police personnel that were explored in present study.

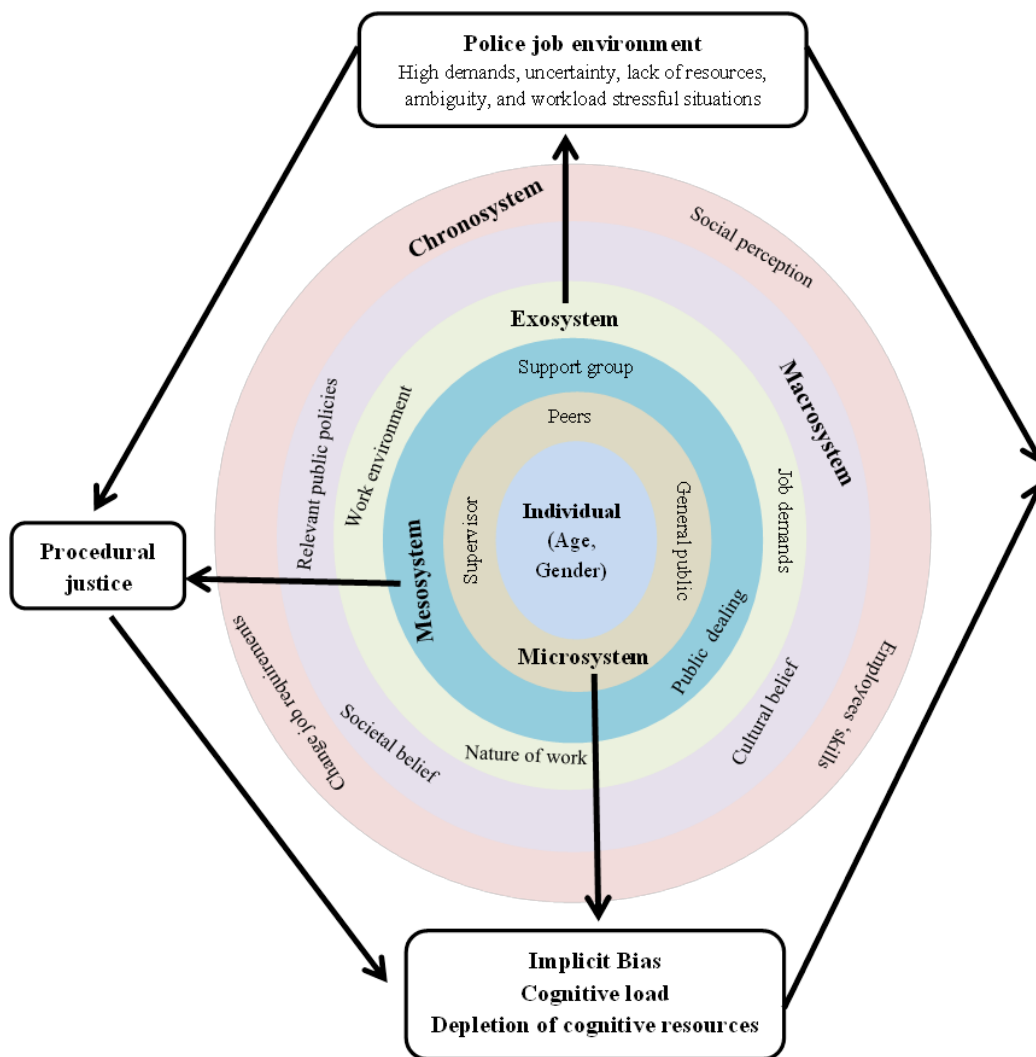


FIGURE 1.1: EST for Pakistani police personnel

In present study at the center of environmental system is the police officer comprising of different specific attributes such as age, gender, personality traits, skills and trainings. The first system closest to police officer in working environment is

the microsystem. This system comprises of peers or colleagues who are other police officers, supervisors which are also police officers, and the general public with whom the police personnel interact daily and directly. Next to microsystem is the mesosystem. For police personnel the major influencing factors of mesosystem is comprised of support groups of police officers, public dealing as a result of daily interaction with general public, trainings and professional development programs by police department. The next is the exosystem that influence the police officer. The active ingredients of this system that influence a police officer might comprise of work environment, nature of job, job demands, job culture and job policies. The environmental system subsequent to exosystem is the macrosystem. This comprise of societal and cultural beliefs along with relevant public policies and public perception regarding police department and police officers. The last environmental system is the chronosystem. In terms of police officers these include factors such as employee's skill and turnover, changes in job requirement, societal perception regarding police officer and evolving departmental policies.

In this study interplay between influencing factors of three environmental factors with regard to the development and behaviour of Pakistani police personnel were explored. These environmental systems include the microsystem, mesosystem and exosystem.

However, the individual i.e. police personnel is at the centre. In term of individual the distinguishing characteristic is their age, gender, years of experience and the cognitive resources of the individual. The cognitive resources are conceptualized in terms of cognitive load and depletion of cognitive resources.

The influencing factors that were targeted in this study from micro system is the implicit biases. The implicit biases might be developed due to direct interaction of police personnel with general public and due to perception of peers and supervisors with whom the police personnel interact directly. The major influencing factor from exosystem is the job environment comprising of high demands of job, uncertainty, ambiguity, stressful situations and workload.

From the mesosystem of police personnel is the dynamics of procedural justice. The

procedural justice is influencing factor due to the police officers interaction with general public. Therefore, in this study the interaction between these three major systems in terms of their specific influencing factors among Pakistani police officers were explored.

1.3 Research Objectives

Following are the objectives explored in present research:

1. To explore the role of job environment and distress of police personnel in cognitive resources and their depletion.
2. To investigate the role of cognitive resources and their depletion in development and enhancement of implicit biases among police personnel.
3. To explore the role of cognitive resource and their depletion, and implicit bias in dynamics of procedural justice among police personnel.

1.4 Research Questions

Following are the research questions of the present study:

1. How the distress, high demands and uncertainties or ambiguities of job environment affect the cognitive resources and lead to depletion of cognitive resources of police personnel?
2. What is the role of cognitive load and depleted cognitive resources in development and enhancement of implicit biases among police personnel?
3. How cognitive load, depleted cognitive resources and implicit bias among police personnel impact the components of procedural justice?

Chapter 2

Literature Review

In order to understand the dynamics of policing as profession and its impact on agent i.e. the police personnel it is necessary to explore the system and its related concepts first. Therefore, this section comprises of evidence from existing literature regarding the role of criminal justice system in society along with highlighting the importance of police in CJs. After that the next step is to understand the working environment of police personnel.

The nature of police profession and its impact on agent i.e. the police personnel are also discussed in light of existing literature evidence. The major focus is on impact of the policing as profession on the cognitive resources of police officers. The emotional, cognitive and behavioural consequences of strained cognitive resources due to nature of police work are also discussed.

This section also outline the existing evidence regarding the concept of implicit bias, impact of strained cognitive resources on implicit bias, its consequences and applicability in terms of different professions with focus on legal system and police personnel. The dynamics of procedural justice is also argued in this section.

2.1 Role of Criminal Justice System

Criminal justice system (CJS) is an essential component of any civilized society due to its role in establishing hindrance to unlawful activities (74). The foremost

function of this socio-legal institute is to control undesired and deviant human behaviour in a social structure that might be hazardous and destructive (75; 76). The essential function of CJS which is to maintain social control is executed through its different components(77).

These components comprise of three major mechanisms including police, prosecution and judiciary. These mechanisms constitute three broad parts or agencies of CJS including law enforcement (police), adjudication (courts), and corrections (parole, prisons and probations) (78). These agencies work together to maintain structure of society (79). Police is an important component of CJS due to its unique and essential role.

2.2 Importance and Role of Police

Police is a crucial component of any country's CJS (80). No modern society operates its justice system effectively without a stable and functional police force/department (81). Police department maintains the internal security and stability within the country (82) by helping modern states to enforce rules and laws within their territories (83).

Police officers are considered as an integral component in building a societal peace. The modern day police perform variety of different functions and are not limited to only crime prevention and detection and maintenance of law. The vast variety of responsibilities on police personnel increases the dependency of societies on police department. This results in imposing new and unique challenges to police personnel in their work environment (84).

2.3 Police Work Environment

Policing is considered as the most dangerous occupation around the globe (85). This is due to its attribute to pose unlimited risk to its agent making it highly stressful and dangerous profession (86). Police personnel is exposed to variety of

significant job related stressors such as threat of physical injuries in their job, high work demands , pressure related to their job, exposure to violence, burnout, fatigue, long working hours and lack of support (87; 88).

Police officers job environment is not only unique but it also impose significant stress (8; 89).They are exposed to traumatic incidents including natural disasters, homicides, assaults and traffic accidents (90). In other words the job of police personnel is inherently dangerous due to risks associated with their job responsibilities (91) and also due to the public and media scrutiny (92).

Police personnel have a highly stressful continues exposure to events that are traumatic and interaction with violent beings. In addition to these two most prominent stressors of their job there is variety of other characteristics of police work that causes distress among police personnel. These include excessive working hours, lack of communication, lack of consultation, excessive workload and lack of support at work place (93).A research study by (94) highlighted some stressors of police work. These organizational and operational stressors include high demands of police work in terms of mental capacity and intellectual abilities, lack of support from higher authorities, lack of work schedule , age , physical environment and police personnel own perception of poor quality work (94).

Additionally, police personnel operate in long duty hours which put strain on them (95). All this existing evidence indicated the role of attributes of police job.In addition to the stress caused by the environmental factors including the constant and persistent exposure to violence and physical injuries there are certain stressors within the organization to which police personnel are exposed (96). This mean that police work environment is stressful and tiring for police officers creating job stress (89) ultimately leading to variety of consequence.

This indicated role of different environmental systems of work /job environment of police officers in the overall development, behavior, personality and perception. The stressful and demanding nature of job with presence of uncertainties and ambiguities results in variety of negative consequences for police officers. These negative consequences results in issues such as physical exhaustion, psychological

concerns, cognitive concerns and behavioural concerns.

2.4 Impact of Police Job Environment on Police Officer

Police job not only impose physical threat to its agent this profession is also associated with psychological and emotional threats such as imposing distress and development of anxiety and depression, post-traumatic stress disorder, suicidal thoughts and behavioural disorders (97). The major risk factors that induce psychological and emotional threats among police officer might include demanding nature of job, ambiguity in work schedules lack of support from organization and interpersonal concerns(90). A research study conducted by (98) highlighted that mental health concerns are related to hostility among individuals. They also concluded that there is general belief that levels of hostility and coldness among police personnel increases with course of their carers (98).

Policing as profession have a considerable toll on mental health of its agent (99). This also contributed to the variety of negative consequences such as hypertension, increased risk of drug abuse and metabolic syndrome, issues of sleep, decreased quality of life and lesser job satisfaction (100; 101; 102). This is due to continuous exposure to highly traumatic and stressful situations including crime scenes, violence and accidents thus exposing them to trauma and chronic stress (96?). In addition to this policing is high demanding job due to long and irregular working hours which contributed to fatigue sleep concerns and poor mental health concerns.

These mental health concerns comprises of depression (103), anxiety (104), post-traumatic stress disorder (105) and suicidal ideation (106). As police personnel life is full of exposure to critical circumstances there is an increased risk of facing traumatic stress which lead to post-traumatic stress (107). The police officers life is full of exposure to such traumatic they have psychological and physiological responses.

When these responses remain unaddressed it contributed to an increase in risk of PTSD, suicide and substance use disorder. Police officers have reported higher rates of PTSD (108), depression and anxiety as compared to general population (109). The unpredictable nature of their job and inherent stressors makes them more vulnerable to psychological distress (110).

It is suggested that individual exposed to chronic and untreated stress results in increased prevalence of disability, chronic pain, hypertension, psychiatric disorders, and substance abuse (111). Work setting with high stress results in increased risk of mental health and behavioural concerns that resulted in negative impact on work performance and quality of life (112).

Previous research evidences suggested that long-term exposure to high stress environments impact negatively to the nervous system thus contributing to behavioural concerns. As police officers work environment expose them to long-term chronic stressful situations they experience state of hypervigilance and behavioural concerns such as extensive use of force (113).

The influence of stress on the cognitive function of individual is extensively argued in the existing literature. It is concluded from number of different research studies that as the stress increases it leads to issues in cognitive functioning such as issues in decision making, judgement and impulse control (114; 115; 116). It is also suggested that the time duration for which an individual is exposed to the stress more actively the behavioural concerns emerge. A research by (114) suggested that the longer a police personnel is exposed to stress the more hypervigilant state.

This alarming situation among police personnel is manifested in their behaviors and functions such as improper detentions, wrongful arrests, responding to the wrong address, shooting unarmed suspects, excessive use of force and failing to recall accurate descriptions or sequence of events (12). The heightened alarm among police personnel is due to police responsibility to overcome never ending demands for increase in public safety and protection from criminals.

Another factor adding to this is expectation from police personnel that they handle every situation with calmness and unified manner even with continuous threat

to their own safety (12). All these indicated that as stressful and uncertain situations widely impact cognitive resources of an individual (117; 118). Therefore one of the major issues emerged from being exposed to continuous stress, uncertainty and ambiguity is compromised (taxed or depleted) cognitive resources.

2.5 Police Job and Cognitive Resources

Considering the stressful and demanding nature of job and its vast variety of consequences, the impact of this job on cognitive resources of its agent is also considerable. The stress and fatigue associated with job of police personnel influence their cognitive functions particularly decision making and memory. This also impact the perception judgment and reporting among police personnel (119).

A research study conducted by (115) concluded that the acute stress persistent in policing impact problem solving abilities and working memory of special operation soldiers. These findings are also relevant to police department as they also operate in similar high stress environment. In addition to stress the prolonged and high cognitive demands also affect cognitive abilities. The high cognitive demands affect an individual's performance by impacting variety of cognitive functions such as slower reaction times and impaired decision making (120). In addition to cognitive demands the cognitive fatigue also plays role influence on cognitive resources (121). This indicated that the influence of working environment on cognitive resources is huge. This influence on cognitive resources also impact various attributes of an individual.

2.6 Consequences of Strained Cognitive Resources

Strained cognitive resources lead to variety of negative consequences among police personnel. The impacted decision making due to high cognitive demands often leads to the faulty and immediate conclusion without considering the alternatives. This results in excessive use of force and unnecessary arrest. The strained

cognitive resources also lead to the burnout. This state of physical and emotional exhaustion diminishes officers' motivation and effectiveness. The existing literature argued the role of depletion of cognitive resources in development and utilization of implicit bias. A research study by (122) indicated that cognitive depletion increases reliance on stereotypes. When police officers are under stress or cognitive load are more likely to make snap judgments based on biases rather than deliberate reasoning. In addition the cognitive fatigue also make police officers more prone to unconscious bias affecting decision making and interactions with people (123).

2.7 Implicit Bias as Theoretical Construct

Implicit bias is an individual's subconscious connections between two incompatible features resulting in negative impact on the quality of decision (124). Implicit bias also known as the implicit attitude or prejudice is a negative attitude which an individual is not consciously aware. An individual's behaviour and perceptions might be influenced by implicit biases even if they are unaware of these biases (APA Dictionary of Psychology, n.d.). These biases are often shaped by experiences and learned association regarding specific attributes and social categories. These implicit biases affect an individual's decision making, understanding and behaviours even without realizing their influence (125).

Implicit bias is usually considered as such structures in an individual mind that are unobservable and results in affecting bias behaviours in unconscious manner(126). Considering the nature of implicit bias as not directly observable construct it is considered as latent mental construct (127). However, considering implicit bias as latent mental construct arises criticism due to its downsides.

One downside is that defining implicit bias as hidden mental construct it becomes a source of defensive reaction from individual when being told regarding their implicit biases (128). Another downside highlighted is regarding the measures of implicit bias. As the measures of implicit bias reflect variety of mental constructs

and process, it is very unlikely that variations in measurement outcomes indicate differences in a single mental construct (129). These downsides result in a shift of focus towards a behavioural perspective of implicit bias (127).

The basis of this perspective is that implicit bias is a behavioural attribute of an individual rather than a mental structure. This means that it is something an individual exhibits through action rather than something that an individual possesses (127). Implicit bias as behaviour is the uncontrollable, unconscious, unintentional and quick response to a variety of social cues (130; 127). A behavioural perspective of implicit bias is considered amoral because it does not involve an evaluation of the appropriateness of these social cues in comparison to some norms. This perspective does not blame the biased behaviour of the individual under the influence of implicit bias. However, it simply attributes behaviour as a function of environmental social cues (127). This helps in understanding measures of implicit bias in terms of behaviours automatically influenced by social cues (131; 129).

A concern arises related to considering implicit bias from a behavioural perspective is that it undermines the crucial component of thoughts and feelings. However, this issue can be resolved by adopting a broad definition of behaviour. As according to (132) behaviour is not limited to the movement of muscles and glands but it also comprises of the conscious feelings and thoughts which are categorised as covert behaviour. This helps in exploring the dynamics of the influence of social cues on conscious thoughts and feelings.

2.8 Implicit Bias among Different Professions

Implicit bias as an issue and its impact on members of various institutions and organizations has been highlighted from previous times. The prominent organizations include institutes related to education (133; 134), public institutions (135), legal entities/ judicial system (136), private organizations and health care system (Maina et al., 2018). However, judicial, educational and healthcare systems are the areas where there is significant documented research related to attitudes

towards bias and denial of implicit bias.

In health care system the unconscious implicit bias is often reflected in terms of the negative impact on quality of care provided to patients and the relationship between patient and health professional (137; 138; 139). In educational system implicit bias can perpetuate educational disparities between districts and students and contribute to a hostile environment rooted in a lack of empathy (140; 141). In judiciary/ legal system implicit bias is reflected in terms of prejudicial council, longer sentences and higher arrest (142; 143). The cultural stigmas related to implicit bias are prominent at such level that even in these major professions where the members needed to be neutral they are hesitant to deal with the implicit biases which in turn has capability to affect the functioning of members of these professionals (). In order to ease the probable impact of implicit bias these institutions worked on development and enhancement of various programs and interventions (144; 145).

2.9 Implicit Bias among Judicial/ Legal System

In judicial or legal system implicit bias is considered as stigmatized unexplored concerns by the allies of the system. A research study conducted by (142) argued that the definition of implicit bias is different in legal literature as compared to the social psychology definition of implicit bias. In legal contexts, implicit bias is generally defined as anything less than an outright confession. This means that even if someone is aware of their biases and acts with prejudice or discrimination, these actions are seen as motivated by implicit bias unless the individual explicitly acknowledges their preconceived bias. In addition to understanding the difference between the definition of implicit bias in social psychology and law other researchers focus on how these implicit bias shape the system. However, another research study highlighted that in social sensitive situations the individuals are more reluctant to express and recognize personal biases. This reluctance is more attributed to fear of potential negative consequences. In sensitive social situations

the implicit measures of bias have greater predictive validity (146).

This results in (142) proposed definition of implicit bias difficult to use effectively in legal/ criminal justice system. The implicit bias in judicial system has multiple effects and consequences which in turn results in impact on the effectivity of the criminal justice system. It also influences the functioning of the major stake holders of the CJS.

A research study by (147) argues regarding the effects of implicit bias on judicial system from the perspectives of police personnel, prosecutors, intake probation officers and administrators. This research study explores the distortion of judgment at different levels among individuals operating in a system of innocent until proven guilty. This study highlighted the impact of implicit bias on an individual at higher level rather than every day face to face encounters by arguing regarding examples of defense attorney and judges functioning for accused children of colour. Implicit bias is further argued in terms of being the cultural issue in court rooms. A research study conducted by (143) tested the implicit bias due to racial differences among United States court system. This research study concluded that the basic principles on which the fairness in legal system actually draws attention to the more racial based attributes such as colour. It is suggested that the basic protection provided in legislation based on this attribute could results in activation of racial stereotypes (143). This also suggested that the system is designed in way that it influences the individuals when judging innocence or guilt. This influence the neutrality fairness in decision making thus compromising the components of procedural justice (148).

2.10 Dynamics of Procedural Justice

The agent of law enforcement exhibit procedural justice in public interactions through fairness in decision making process and treating the citizen along with respect of normative boundaries of general public (149; 150). The exhibition of procedural justice components strengthens the social bond between general public

and representative of legal institute (151). The basic idea behind the conceptual basis of procedural justice is that the general public start doubting the legitimacy of legal institutions when agent fail to exhibit fairness in exercising their authorities (152) .

In criminal justice research, procedural justice refers to the perception that legal institutions, such as the police and courts, operate fairly and justly during law enforcement processes (153)). Advocacy for procedural justice in the criminal justice system has been significantly shaped by (153)foundational work on procedural justice and public compliance. Expanding upon his research, (152) developed a process-based regulation model, which outlines the psychological pathway linking procedural justice perceptions to long-term public acceptance of and cooperation with authorities. This model posits that two key factors shape people's evaluations of procedural justice: the quality of decision-making and the nature of interpersonal treatment in encounters with authorities (Tyler Blader, 2000).

When assessing decision-making quality, individuals focus on whether authorities exhibit neutrality and fairness, avoiding personal biases in their judgments. Public trust in procedural fairness increases when authorities base their decisions on objective information rather than prejudices. Furthermore, when decisions adhere consistently to established rules and regulations, and individuals are given opportunities to present evidence and explanations, these processes are more likely to be perceived as just. On the other hand, assessments of interpersonal treatment focus on the public's experiences during interactions with authorities. People expect to be treated with respect and dignity, as such treatment signals recognition of their social status and value (152). In addition to this there are several factors that undermine the procedural justice in public police interactions.

One of the major factors highlighted in the existing literature is that lack of fairness in department of police results in diminishing of police personnel commitment to apply the principles of procedural justice with general public as well (154)). It is also indicated that as police personnel adhere to set standards and often fail to consider individual circumstances. This also leads to perception of undermining

procedural justice components by police personnel (155). Such perceptions among general public leads to the brutal image of police personnel among them. This factor become more prominent in a country like Pakistan where police department is based on the colonial nature and is being feared and perceived as unjust institute among general public.

2.11 Police in Pakistan

The police department of Pakistan face significant challenges and also lost trust of general public. The affectivity of police department is always in question. The existing research indicated that Pakistani police department is facing variety of challenges. The key challenge is the structural and organizational difficulties. One of the major structural issues in Pakistani police departments is the centralization of power and authority within a rigid hierarchical system. The strong top-down approach limits the autonomy and decision-making ability of lower-ranking officers, reducing overall efficiency and responsiveness (156). This centralized structure impedes effective communication and operational coordination, ultimately affecting the delivery of justice and public safety (156). Given these limitations, decentralizing decision-making and empowering lower-ranking officers is essential for improving police performance and procedural justice (156; 157).

In addition the existing literature also highlights the police officers frequently resort to coercion due to insufficient training and weak accountability mechanisms (158). Political interference and corruption further exacerbate this problem, making it difficult to hold officers accountable (158). These challenges are directly tied to cognitive strain and depleted decision-making capacity, leading to potential biases in law enforcement practices.

Similarly, political interference affects police impartiality by enabling politically motivated appointments, manipulation of investigations, and misuse of resources(159).

These external pressures add to cognitive load and emotional exhaustion among officers, affecting their ability to engage in fair and unbiased decision-making.

Recognizing these issues, the Pakistani government has introduced various reforms to enhance police accountability and professionalism. The National Police Bureau, established in 2002, aims to develop policies, conduct research, and improve officer training (160). However based on these the reforms and modifications in Thana culture by policy makers proved to be only in favour of rulers and policy makers and has significantly negative influence on the performance of police personnel in Pakistan (161). This indicated that police personnel being the most important ingredient of policing have very little attention in research and policy especially in Pakistan (162). Considering this need the present research focused on exploring the perspective of Pakistani police officers regarding the impact of these challenges and issues of their work on themselves.

The above preceding discussion from existing literature indicates that the structural organizational and operational challenges faced by police personnel collectively contributes to cognitive strain among police personnel, affecting their ability to engage in fair, unbiased decision-making and procedural justice. Furthermore, the research in Pakistani context is focused on structural modifications rather than addressing the well-being and cognitive demands of police officers, limiting their effectiveness in maintaining law and order.

By integrating EST, this research acknowledges that the cognitive strain, implicit biases, and procedural justice outcomes of police officers are not isolated phenomena but are embedded within a complex, interdependent system. Understanding these ecological influences can provide deeper insights into how policing practices evolve, how implicit biases are reinforced, and how systemic reforms can be tailored to enhance both officer well-being and public trust in law enforcement.

Chapter 3

Research Methodology

3.1 Research Design

This study employed qualitative research design constituting of fifteen in depth interviews to explore the perspective of Islamabad police personnel.

3.2 Ethical Considerations

The ethical approval of the present study was obtained from Ethics Review Committee of Faculty of Management and Social Sciences of Capital University of Science and Technology. Following the APA (2003) code of conduct information sheet and informed consent were prepared. The information sheet was developed for participants in order to help them understand research objectives effectively. The information sheet informed participants regarding rights to confidentiality, privacy, voluntarily participation and withdrawal at any time before the completion of study.

The insight obtained from participants was only utilized for research purposes and reported as collective findings. The identities were kept anonymous along with confidential storage of interview recordings in e-form. The participants had the right not to answer any question if they feel uncomfortable. The data was accessed only by researcher and the supervisor till the analysis and compilation

of research findings. The information sheet and informed consent is attached in appendices as appendix A and B respectively.

3.3 Sample and Sampling Criteria

A total of 15 in depth interviews, from different ranks of police personnel were conducted. The sample size was calculated based on saturation point. The existing evidence suggested that the saturation of data for in-depth interviews is assumed at 12-20 interviews (163; 164) . Therefore, the sample size for present study was selected to be fifteen participants. Convenient sampling technique was utilized for the recruitment of the sample.

3.3.1 Inclusion Criteria

Following are the inclusion criteria for participants of this study:

1. Police personnel of different ranks from Islamabad were included in study.
2. Police personnel with experience of at least five years were included in study.
3. Only male police personnel were included as participants in this study.

3.3.2 Exclusion Criteria

Following is the exclusion criteria for participants of this study:

1. Individuals with any physical and mental disability which hinder their participation in study were excluded.

3.4 Instruments

The major instruments utilized in present study included demographic sheet and interview guide. The demographic sheet and interview guide were developed in Urdu language considering the primary language of the participant's.

3.4.1 Information Sheet

The information sheet consisted of main objectives of the research along with the rights to confidentiality, privacy and withdrawal. The sheet also consisted of information regarding sources of help. This information regarding available support help the participants in highlighting who they might be contact if felt upset or needed any additional support.

3.4.2 Demographic Sheet

Demographic sheet was utilized to obtained basic demographic characteristics of participants. These basic characteristics included gender, age, area of residence, years of experience in police department, current job locale, rank, prior job experience in any wing of police department or other places/ organizations, and physical and mental illness along with their treatment. This basic information regarding different characteristics of police personnel helped in understanding the contextual and background dynamics of their perceptions and perspectives.

3.4.3 Interview Guide

A semi structured interview guide for in depth interviews was developed to explore the perception of police personnel. The interview guide was primarily in Urdu language. The semi structured interview guide is beneficial due to its ability to provide flexibility. This help in conducting a relatively detailed interview thus providing an opportunity to focus on key research questions and also probe regarding the central topics. This also adds advantage by being responsive to the perception of participants (165; 166).

When developing the interview guide attention was paid to the complexity and difficulty of the language utilized. It is ensured that in terms of language the participants fully understood the questions. Interview guide was prepared based on the major objectives and research questions of this study along with evidences

from existing literature. The interview guide comprised of open ended questions. Sub questions related to main research question were added in the interview guide to gain better understanding of police personnel regarding targeted phenomenon. A list of topics included in the interview is presented as follows (for complete interview guide see appendix D in appendices):

1. Rapport building questions
2. Perception of job environment of Pakistani/ Islamabad police
3. Effect of job environment on cognitive resources
4. Impact of uncertainty and ambiguity of job on cognitive resources (in terms of attention, problem solving, judgment, decision making and thought process)
5. Role of uncertainty and ambiguity in development and enhancement of implicit bias
6. Role of strained cognitive resources in development and enhancement of implicit bias
7. Impact of job environment on dynamics of procedural justice (respect, trust, neutrality and voice)
8. Impact of strained cognitive resources on dynamics of procedural justice (respect, trust, neutrality and voice)
9. Impact of implicit biases on dynamics of procedural justice (respect, trust, neutrality and voice).

3.5 Procedure

Islamabad police personnel of different ranks were contacted based on personal references of researcher. The interviews were conducted with in the premises of different police stations of Islamabad. The police personnel were requested to provide an empty room within the police station for conduction of interviews. Interviews were taken in Urdu language. However, some participants also used Punjabi language while responding to interviewer. Each interview took approximately 30 to 50 minutes.

This variation in time might be due to the individual differences in being detailed and open in their responses. Another factor that influences time is the nature of their jobs and interruptions by different means during the interview. Before interviews the participants were informed regarding the objectives of study. The participants were provided with the information sheet and written informed consent was also obtained from the participants. Prior to interviews the participants were asked to fill demographic sheet.

After filling demographic sheet the researcher had conversation with participants regarding their daily activities and their overall experience of working in policing. This helped in developing rapport with the participants. After initial conversation the participants were also verbally asked about permission regarding recording of interviews. The interviews were audio recorded for almost all participants. However, one participant denied the permission of recording. This was handled by taking written notes. Questions were asked mostly in logical order. However, the researcher was more focused on the flexible approach by going between questions to allow more conversational style. During the interviews the interviewer also adds some questions based on the direction of the conversation being conducted. The participants were also encouraged to share their insight by adding different verbal and nonverbal probes throughout the interview. After conducting interviews all the participants were given opportunity to question. The audio recorded interviews were then transcribed.

3.5.1 Observation Journal

The observation of researcher was maintained in form of journal. This journal comprises of personal experiences of researcher at various stages of the research. These included researcher's experiences while obtaining ethical approval, contacting participants, conducting interviews, behaviour/ attitude of participants and environment of Islamabad police station. (For observation journal for this study see Appendix D in appendices).

3.6 Analyses

Audio recordings of the interviews were transcribed through verbatim transcription. This included all the speech in audio exactly as spoken along with all pauses, and fillers (e.g. "*Hun, Acha, Sahi, Theek hai, Bilkul*"). Interviews were conducted in bilingual format therefore the transcription was also done in both Urdu and English language. The transcriptions were proof read before analyses. The transcriptions were analyzed using inductive thematic analysis to identify codes within the transcripts. The codes were then linked in to subcategories and categories. These categories and subcategories are then linked in to explanatory sub themes and themes. Data was analyzed manually.

The first step in data analyses was to get familiar with data. The familiarization process was done by reading the transcripts repeatedly. The process of coding was started after thoroughly reading the transcripts. The transcript of each interview was then coded using descriptive coding. In this first cycle of coding the descriptive codes were developed using sentence by sentence coding.

A list of codes was prepared for each interview. A log of descriptive comments for initial codes was maintained by numbering the description of codes in transcript. After that a second cycle of coding was employed on the list of codes generated during first cycle.

Subcategories were established based on analytic direction emerged in the first cycle of coding. In the next step focused coding was used to analyze and interpret broader segments of data. Categories were developed in alignment with the analytical structure emerged in list of subcategories.

Color coding was carried out to extract categories based on sub categories. The next step was axial coding in order to arrange the subcategories and categories in to sub themes and themes. This help in sorting out the relationship between categories and subcategories to be emerged as explanatory sub themes and themes. For extracting themes the researcher identified similar patterns, common and recurring concepts in the data followed by clear and concise descriptions. All these

steps were cyclical, with the researcher transitioning back and forth between different steps. In order to ensure the validity of interpretations of themes emerged original transcripts were revisited. A table of raw quotes from the data was also maintained to evaluate credibility and representativeness of the themes. Lastly, the themes were sorted in alignment with the major research questions and objectives of the study.

Chapter 4

Results

This chapter comprises of findings of present study. This includes the demographic characteristics of the participants interviewed. The themes, subthemes and categories extracted from the insight obtained from participants are also mentioned in this chapter. The description of these themes, subthemes and categories along with the verbatim of the participants is also presented.

4.0.1 Demographic Characteristics

A total of 16 interviews were conducted from Islamabad police officers of different police stations. One interview was discarded based on quality of data. The sample was recruited from five different police stations of Islamabad. 44% of total sample was recruited from police station Sihala. 38% of participants were recruited from police station Sawan Zone. The remaining 18% of the sample was recruited from police stations Kirpa, Koral and ICT. The interviews were conducted from 3 sub inspectors, 3 head constables, 2 inspectors, 6 assistant sub inspectors, 1 sub constable .

Most of the participants interviewed have more than thirty years of job experience in police department (i.e. 56%). In the participants interviewed 31% have twenty and above years of experience while 13% have less than ten years of experience. One participant did not reported age and when asked said that age is just

a number. Two participants reported physical concerns and one reported cognitive concern. None of the participant reported regarding professional help seeking for mental health concerns. The table below presented the demographic characteristics of participants.

TABLE 4.1: Demographic characteristics of participants (N=15)

Sr. No	Pseudo names	Gender	Age (Year)	Years of job	Area of job	Rank
1	Sheer	Male	58	38	Sihala	SI
2	Ammar	Male	49	24	Sihala	HC
3	Nadeem	Male	41	20	Kirpa	Hc
4	Affan	Male	56	34	Koral	SI
5	Khan	Male	58	39	Sawan Zone	Insp.
6	Rizwan	Male	51	31	Sawan Zone	ASI
7	AlahDita	Male	31	9	Sawan Zone	ASI
8	Usman	Male	Not reported	20	Sawan Zone	SC
9	Rehman	Male	27	6	Sawan Zone	ASI
10	Awan	Male	57	38	Islamabad	Insp.
11	Saeed	Male	56	35	Sawan Zone	ASI
12	Bilal	Male	50	28	Sihala	ASI
13	Adullah	Male	52	28	Sihala	HC
14	Ejaz	Male	54	34	Sihala	ASI
15	Ajmal	Male	56	34	Sihala	SI

ASI=Assistant SubInspector,SI=SubInspector,HC=Head Constable,Insp.=Inspector

4.1 Findings from Thematic Analysis

A total of seven major themes were extracted through inductive thematic analysis from interviews. The themes include dynamics of job, cognitive resources and implicit bias, interplay between cognitive resources, implicit bias and procedural justice, coping and organizational improvements. This section below provides brief overview of each theme along with its subthemes and categories of these subthemes. The verbatim of participants is also added in the description of these themes. The major themes generated from the data collected through interviews are presented in table below along with their subthemes and categories.

TABLE 4.2: Themes, Subthmes and Categories(continued on next page)

Themes	Subthemes	Categories
1.Job Dynamics	1.1.Job Characteristics	1.1.1. Job demands and workload
	1.2. Job Responsibilities	-
	1.3.Job Difficulties	1.3.1. Jobpressure and uncertainty
	1.4.Impact of Job Characteristics and Difficulties	1.4.1. Cognitive & psychological Impacts
2.Dynamics of Cognitive Resources	2.1.Determinants of cognitive resources and their depletion	2.1.1. Cognitive loads and demands
		2.1.2. Mental exhaustion
		2.1.3. Stress induced depletion
	2.2.Consequences of strained cognitive resources	2.2.1. Memory and focus issues
		2.2.2.Issues in decision making and problem solving

Themes	Subthemes	Categories
3. Dynamics of Implicit Bias	3.1. Development of implicit bias	-
	3.2. Evaluation and Consequences of implicit bias	-
	3.3. Depletion of cognitive resources and bias	-
	3.4. Other contributors to implicit bias	-
4. Interplay between Cognitive resources and Procedural justice	4.1. Perception regarding procedural justice	-
	4.2. Cognitive resources and neutrality	-
	4.3. Cognitive resources and respecting others	-
	4.4. Cognitive resources and trust	-
	4.5. Cognitive resources giving voice	-
	4.6. Other determinants of procedural justice	-
5. Interplay between Implicit Bias and Procedural justice	5.1. Dynamics of Respect	-
	5.2. Dynamics of Neutrality	-
	5.3. Dynamics of giving rights to others	-
	5.4. Dynamics of Trust	5.4.1. Determinants and implications of trust dynamics
6. Coping	6.1. Individual coping	-
	6.2. Departmental initiatives for coping	-
7. Organizational Improvements	7.1. Facilitating factors for work environment	-
	7.2. Managing resource constraints	-

As the present study hypothesized the interplay between three environmental systems of EST. The figure below presents the findings of the study in terms of themes linked to ecological system theory.

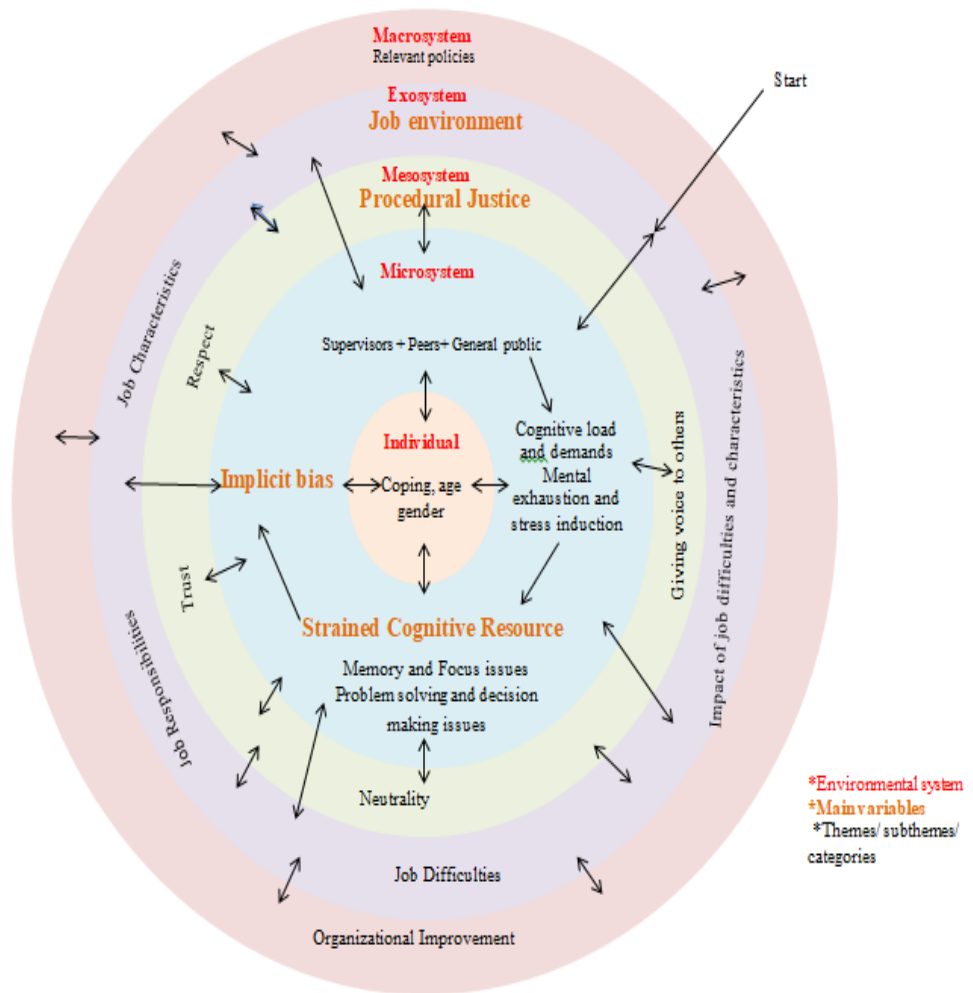


FIGURE 4.1: Findings based on EST

This figure indicates the interplay of the extracted themes in accordance with the relevant environmental system of police personnel. It is indicated in findings that the exosystem of the police personnel comprising of job dynamics (job characteristics, responsibilities and difficulties) interact with each other to create an influence of these attributes of exosystem on police personnel. This impact is exhibited in the microsystem of the individual by creating cognitive load and demands along with mental exhaustion and stress induction. The attributes of the microsystem (superior’s peers and general public) interaction also add to these cognitive impacts.

It leads to strained cognitive resources or depletion of cognitive resources in terms of issues of focus, memory, problem solving and decision making. These strained cognitive resources leads to implicit biases among police personnel. This indicated that various components of microsystem interact with each other and results in influence of behaviour of police personnel which is exhibited in the public dealings (i.e. mesosystem of police environment). The findings also indicated that in term of public dealing there are four major components that makeup the exosystem. These components are the key aspects of procedural justice.

The insight obtained by police personnel stated that implicit bias affect respect, neutrality and trust however the giving voice to other component of procedural justice is not influenced by this aspect of microsystem . The component of microsystem that influences the giving voice to other component of procedural justice is the strained cognitive resources and mental exhaustion which are the contributing factors for the implicit bias.

The findings also highlighted that the exosystem components of police personnel environmental system also directly affect the cognitive resources and implicit bias. The exosystem also affects the mesosystem of police personnel directly. All these findings support the initial hypothesized model of this study. However, the finding indicates some unique aspects as well. The findings highlighted that the macrosystem also influence the exosystem which in turn affect all the other environmental systems of police personnel.

The findings also highlighted that the exosystem affect the other two systems (microsystem and mesosystem) directly and also by interaction with the individual system to influence the other. These two systems also interact independently to impact the police personnel. The findings also highlighted that the personal attributes of the individual such as age, coping, gender and years of expertise also impact directly to the microsystem of police personnel.

The section below provides brief overview of each theme along with its subthemes and categories. The verbatim of participants is also added in the description of these themes.

4.1.1 Job Dynamics

The participants highlighted that the dynamics of police job is one of the major aspect that influence police personnel. In terms of mentioning regarding job environment the participants mentioned specific job characteristics and responsibilities that make it unique. Along with unique job responsibilities and characteristics there are certain difficulties of job that make police personnel working environment challenging. This leads to variety of consequences among police personnel.

The following figure outlines the subtheme and categories of job dynamics.

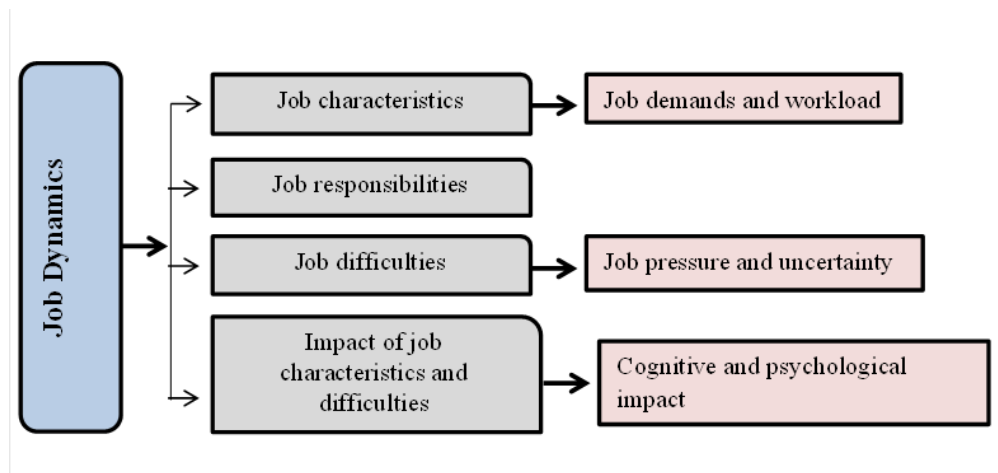


FIGURE 4.2: Subthemes and categories of Job Dynamics

4.1.1.1 Job Characteristics

In terms of job characteristic police personnel highlighted two core features of police job. These include high demands of job and workload. These key aspects of job characteristics influence the overall job dynamics of police personnel.

Job demands and workload: In terms of high demand police personnel reported that their job requires constant availability and presence. This not only influences the professional aspects of police personnel but also results in strain personal and family life. The police officers describe their role as

"ہم سرونٹ ہیں 24 گھنٹے کے"

"We are servants of 24 hours"

This indicated that police personnel perception about their job and its responsibilities is constructed in way that results in distress and exhaustion. Additionally, the police personnel believe that the general perception of department and public is that they are "machine". They said that

"یہاں تو پولیس کو کہتے ہیں کہ یہ بس ایک ماشین ہے"

"Here police officers are considered as machine"

This indicated that police personnel high demands of work leads to the workload which altered their perception regarding job leading to exhaustion, fatigue and distress.

The participants reported that another major characteristic of police department is excessive workload leading to long duty hours. This extensive workload results in mental exhaustion and issues of behaviour with general public. One of the participant mentioned that

"burden کام زیادہ ہونے کی وجہ سے رویہ متاثر ہو سکتا ہے کبھی۔۔۔ (انہاں) یہ بھی ہو سکتا ہے۔۔۔ for example آآآ public کے

ساتھ کبھی آدمی اونچی آواز میں بھی بول لیتا ہے"

"Behaviors can be affected due to the burden of work. It can also happen. For example, sometimes a man speaks in a loud voice with the public"

It is also mentioned by the police personnel that extensive workload is also reason of unavailability of police personnel in police stations which is considered as their lack of motivation to work. This also results in lack of trust among general public related to police personnel. These insights from police personnel highlighted that the lack of fulfillment of responsibilities is used as coping by police personnel to their excessive workload.

4.1.1.2 Job Responsibilities

According to the participants the basic responsibility of police department as whole is to facilitate and help general public. They call it as

"عوام کی خدمت ہمارا فرض ہے"

"Serving general public is our duty"

There are variety of tasks and activities that are mentioned as police responsibilities by police personnel. These include providing justice, helping general public, court hiring's, investigations, law and order duties, resolving conflicts, handling criminals and handling deployment of resources in police department. They also mentioned that these responsibilities are specified according to the rank of police personnel. It is stated by police personnel that

"پولیس میں ہر ایک بندے کی اپنی اپنی duty ہے"

"In police every individual have their own duty"

They also mentioned that variety of job responsibilities results in difficulties and challenges for police personnel which not only affect them personally but also influence overall police department. Besides that, the participants also highlighted that unpredictable nature of job responsibilities results in distress, fatigue and tension. They said it as

"ہم ہر وقت آگ سے ہی لڑتے رہتے ہیں"

"We always fight with fires"

This indicated that the nature of job responsibilities of police personnel results in influence to their emotional and personnel attributes.

4.1.1.3 Job Difficulties

As the participants mentioned that the difficulties of their job arises from two major factors. These include the pressures and uncertainties prevalent in police department. These pressure and uncertainty results in overall tension and distress in the department.

Job pressure and uncertainty

Police personnel emphasized that their job is filled with pressure. They said it as

"ہماری ڈیوٹی ہے ہی یہی ہے"

"This is our duty"

According to the participants, police personnel operate in extremely pressured situations managing tasks directly related to human live which create extensive pressure. One participant said that

"ہمارا ذہن ہر وقت بس بھرا ہوا اور ٹینشن میں رہتا ہے ایسے لگتا ہے کہ یہ دماغ کسی وقت بھی پریشرنگ کی طرح پھٹ جائے گا"

"Our mind is always full and tense, it seems like it will burst at any moment like a pressure cooker"

In addition to nature of their jobs, police officers highlighted the presence of external pressure from political authorities, general public and superiors as significant stressor. The participants also mentioned that despite the pressure police personnel have adapted in handling such pressures ensuring that their behaviour and performance remain unaffected. They said it as

"جو بھی کام ہے آپ نے کرنا ہے"

"Whatever work it is you have to do"

The police personnel also highlighted the role of attitudes and behaviours of general public towards police personnel and department which also leads to pressure

on police personnel. One police officer said that

"پولیس والے کے ساتھ اگر لوگوں کا رویہ اچھا ہو جوئے نا۔۔۔ (ا:ہوں) ٹھیک ہے تو اس کی زندگی آسان ہو جائے"

"If the attitude of the people is good with the policeman, their life will be easy".

These insights from police personnel indicated that the three are variety of sources that put significant pressure. The presence of continuous pressure results in cognitive and emotional load among police personnel. However, the role of time in handling the pressure is also highlighted by the participants.

In addition to job pressures the participants also mentioned that presence of uncertainty is also core characteristic of police department. They highlighted that there are varieties of uncertain situations, with each uncertainty more severe than last. However, for some participants uncertainty was seen as part of police job and is not considered as issues. This indicated that there is variety of perception regarding the issues of police job within the department. This variety of perspectives is due to individual differences and differences in the experience of the participants. The participants also highlighted strategies for managing and handling uncertain situations such as seeking support from peers and superiors. These uncertainties sometime impact the behaviour of police personnel with general public. The personal impact of exposure and handling of such uncertainties is often overlooked in order to fulfil departmental responsibilities. They said it as

"ہم اپنے آپ کو اپنا گراف نیچے کر کے۔۔۔ (ا:ہوں) محلے کا گراف بلند لیتے ہیں"

"We lower our own graph and raise the graph of the department"

These insights from the participants outlines that the uncertainties of the job influence them in variety of ways such as behavioural concerns, mental exhaustion, disturbances and tiredness. Some of the participants cope this by seeking help from others.

4.1.1.4 Impact of Job Characteristics

In term of impacts of the above mentioned characteristics of job the participants highlighted cognitive and psychological influence. The participants mentioned that uncertain situations and incidents is core characteristic of police department therefore its impact among members of this department is prominent.

Cognitive impacts

The participants highlighted the role of uncertainty in cognitive depletion through targeted impacts on cognitive and mental abilities. These include mental exhaustion, tiredness and disturbances, impact on problem solving and decision making abilities and basis for judgemental opinions regarding general public.

Police personnel mentioned that persistent pressure conditions of police department are major reason that leads to mental exhaustion among police officers. They also highlighted the role of workload in mental exhaustion. The participants called it as

" ذہنی مشقت / ذہن کا ماؤف ہونا "

"Mental fatigue/mindlessness"

The participants also highlighted the role of situations and circumstances in mental exhaustion. The nature and severity of circumstances affect the level of exhaustion. They stated that when the circumstances are negative the job nature is considered as

" کس مصیبت میں پڑ گئے ہیں "

"In what trouble we are in"

The participants also mentioned variety of influence such as difficulty in listening,

trusting and making decision, neutrality and strained behaviours. While mentioning regarding the nature of behaviour they said

" اسے کہوں گا نکل جاؤں یہاں نظر نہیں آتا "

"I will tell him to go out and not be seen here"

Prominent behavioural concerns include irritability and verbal anger called as

" چلانا عام عوام پر "

"Shouting at general public"

Another major influence mentioned by participants is strained problem solving abilities. However, the participants highlighted that the continuous exposure to accidents does not impact their problem solving skills. They considered continuous exposure to different incidents as

" آئے روز کوئی نیا تجربہ "

"Experiencing something new every day"

The participants also highlighted that the interpretation of events and issues in police department is contributor to the effectivity of problem solving skill. If there is distress and pressure the problem solving is impacted negatively. Some of the participants also added that they are still learning and polishing their skills related to problem solving. It is stated by one participant that

"مشکلات کے حل کے بارے میں تو کچھ نہیں کہہ سکتا۔۔۔ میں تو ابھی learning کر رہا ہوں"

"I can't say anything about solving problems. I'm still learning."

In addition to problem solving the police personnel highlighted that their job characteristics and difficulties also impact their decision making. However, one of the

participants said that decision making is not affected by pressure and uncertainties of job. According to the participant "*thinking immediately*" (*Yakdam Sochna*) is the characteristic of police personnel. While mentioning the impact of strained decision making abilities the participants mentioned that affect the neutrality of police personnel towards general public.

This impact on cognitive resources results in developing judgment based on certain traits as characteristic of this job. While talking about judgment and opinions participants highlighted that they have no negative impact on the interaction of police personnel with general public. They also mentioned that these judgments are based on the experience and expertise of the police personnel. They called it as

"تجربات کی روشنی میں"

"*In light of experience*"

These insights regarding the cognitive impact of job difficulties among police personnel highlighted that the working environment of police personnel affect the cognition in way that not only influence the work but also the personal life of the individual that leads to variety of psychological and emotional concerns.

Psychological impact

The psychological impact of job dynamics among police personnel is highlighted in terms of fatigue and tiredness, impact on behaviour and personality attributes. Police personnel highlighted that one of the most prominent consequence of pressure of job is misbehavior with general public. It is also mentioned that during night duties the pressure is more resulting in disturbed behaviour in comparison to the behaviour of police during daytime. They called this behaviour as "rude". Some of the participants said that even there is extreme pressure in police department the behaviour with general public is good to extent to which it should be.

They said that

" پولیس والا ہمیشہ صبر سے کام لیتا ہے "

"Police officer is always work with patience"

Some participants focus on the role of upbringing in behaviour of police officers rather than the role of departmental pressure and workload. Police department nature of work and job affect the whole personality of the individual. However, most of the participants mentioned that the job nature such as workload and pressure bring positive changes in them such as increase in confidence and bring patience in them. They mentioned that the job change a person's environment and life. The changes in person's life are due to vast variety of experience that changes an individual thinking and behaviour.

Police personnel often experience tiredness and fatigue due to presence of workload, uncertainties, issues and unique nature of job. This affects significantly their behaviour and productivity. One of the significant consequences of tiredness is its impact on behaviour often leading to negative outcomes. The tiredness often results in misbehaviour manifests as anger towards general public along with use of abusive language and heightened agitation. The participants also highlighted that this tiredness affect objectivity and impartiality of police personnel. The participants mentioned that when police personnel experience stress and fatigue, they often attempt to relax by taking a day off. They also highlighted that one of the most common strategies for coping with fatigue is taking a break to have tea often emphasizing

" ٹی چاہتا ہوں سب سے "

"Tea is everything"

Additionally, they mentioned that in order to alleviate stress, they allow some time

to pass thus enabling the stressor to diminish its intensity. These insights regarding cognitive and psychological impact of job dynamics highlighted that work environment or dynamics of police personnel influence the development, perceptions, attitudes and behaviours of police personnel. The insights of this theme focused on the exosystem of police personnel which consists of components related to the work environment. This theme also highlighted that how these components interact with each other to influence the individual as whole and also its influence on other environmental system.

4.1.2 Dynamics of Cognitive Resources

The participants highlighted two major aspects in term of dynamics of cognitive resources among police personnel. These include determinants of cognitive resources and depletion and consequences of strained or depleted cognitive resources.

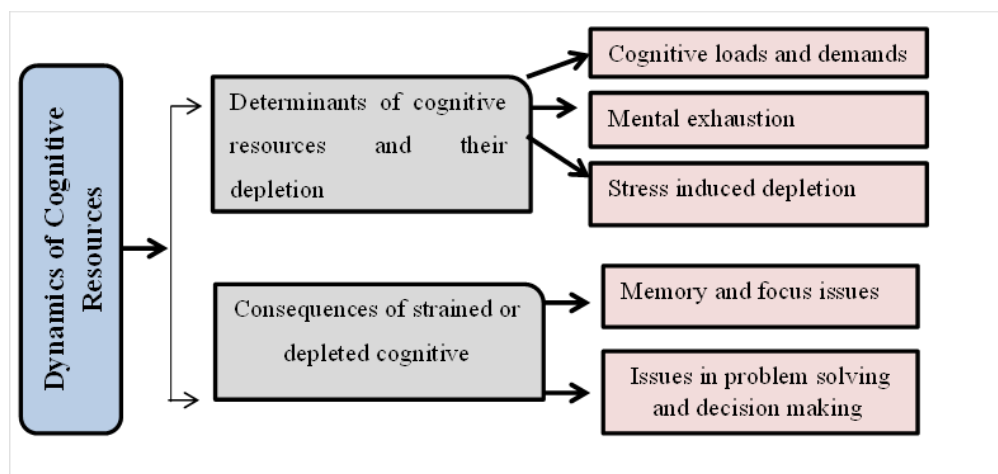


FIGURE 4.3: Subthemes and Categories of Dynamics of Cognitive Resources

4.1.2.1 Determinants of Cognitive Resources and their Depletion

The participants highlighted three major aspects in term of determinants of cognitive resources and their depletion. The participants mentioned regarding the role of cognitive load and demands, mental exhaustion and stress in depletion.

Cognitive loads and demands

The participants highlighted cognitive demands and loads as key factor affecting cognitive resources of police personnel. According to the participants the challenges and expectations from police contributes to the cognitive load and demands. They highlighted that long working hours are another major factor that contributed to the cognitive load of police personnel.

Additionally, the unpredictable and haphazard events occurring within police department further intensifies cognitive load. The participants mentioned that most of the time this cognitive load is offloaded in form of misbehaviour with general public which is called as "Irritability" by police officers. This indicated that the characteristics of working environment of police personnel influence their interaction with peers and also results in cognitive load which in turn leads to exhaustion among police officers.

Mental exhaustion

The participants shared their perspective regarding the role of mental exhaustion in depleting cognitive resources. The participants highlighted several factors contributing to mental exhaustion among police personnel. These include the pressure associated with job along with additional pressure from superiors and third party. They also emphasized that the lack of proper schedule impacts various aspects of police personnel life thus leading to mental exhaustion. The referred to their work as

"بے ٹائمی ڈیوٹی"

"Timeless duty"

It is also mentioned by the participants that the mental exhaustion of police personnel also depend on the personal interpretation of circumstances and dynamics of situations and tasks. As one participant explained

"اگر ہم کاموں کو منفی لیں گے تو اس کا جسمانی بھی ہمارے پاس tensions create ہوگی روحانی بھی اور ذہنی طور پر بھی ہوگی۔۔۔"

"If we take things negatively, it will create tensions physically, spiritually and mentally as well."

All this mental exhaustion contributed to the stress of police personnel which also impact their cognitive resources.

Stress induced depletion

In terms of stress induced depletion the participants focused on the impact of job stress and pressure on cognitions and cognitive resources including focus, decision making and problem solving. This prolonged stress is often referred to as "Depression" by participants. They further noted that the constant exposure to high pressure situations and demanding environment exacerbates this depletion, making it increasingly difficult to manage daily responsibilities effectively.

In addition to highlighting the reasons or determinants of the strained cognitive resources the participants also share their perspective about the consequences of strained and depleted cognitive resources.

4.1.2.2 Consequences of Strained or Depleted Cognitive Resources

While mentioning about the consequences of strained or depleted cognitive resources the participants highlighted issues of memory, focus decision making and problem solving as major consequence among police personnel.

Memory and focus issues Memory is considered as an important cognitive ability within police department. The participants emphasized that the rules and regulations of their job significantly impact memory. In addition, the expectations placed on police personnel also affect their memory. They noted that memory of police officers often deteriorates over time due to the demanding nature of the environment. As one participant expressed “

"یہ ماحول ہمارا کبازہ کرتا ہے"

"This environment makes us junk"

They also mentioned regarding the adverse effect of memory issues on daily activities and performance of police personnel. In addition the participants also highlighted the dynamics of issues of focus among police personnel.

While mentioning regarding the issues of focus the police personnel highlighted that the difficulties of job combined with family issues results in lack of focus and divided attention among police personnel. They said it as

"میرا ذہن جو ہے وہ divide ہے"

"My mind is divided"

However, there is also presence of opposite perspective regarding the influence of nature and issues of job on attention and focus. Some participants said that there is no influence of problems of police job on attention and focus. They also highlighted that being a police officer whenever there is lack of focus and attention the cognitive resources are undermined. They also mentioned that uncertainties of police department results in lack of focus among police personnel. It is also mentioned by participant that police department is built in a way that we can't focus on single event or aspect. It is said by the participants that

"جب ایک پولیس ڈپارٹمنٹ میں یہ اس لحاظ سے بنایا ہے کہ آپ ایک چیز پر فوکس نہیں ہو سکتے پریشانی کہاں سے ہے"

"When a police department is built in such a way that you can't focus on one thing, where does the problem come from?"

Issues in decision making and problem solving

One of the major factors that lead to the issues in decision making as mentioned by participants is pressure from superiors. The uncertainties inherent in police job also affect the cognitive processes such as thinking of police personnel thus compromising decision making. They said that when decision making abilities of police personnel are impaired it often lead to biased behaviour towards the general public. Police personnel mentioned that problem solving of police personnel deteriorates over time with prolonged exposure to uncertainties and traumatic incidents. They also highlighted the significant role that family issues plays in hindering effective problem solving, further impacting their professional performance.

These insights from participants highlighted that the exosystem of police personnel is influencing the microsystem. The findings also showed that the components of microsystem interact with each other to influence the cognitive abilities and perception or attitudes of police personnel.

4.1.3 Dynamics of Implicit Bias

According to participants implicit bias among police personnel is a phenomenon that is not conceptualized among them but is utilized and its consequences are prominent in police department. The key attributes mentioned by participants is mentioned in the figure below.

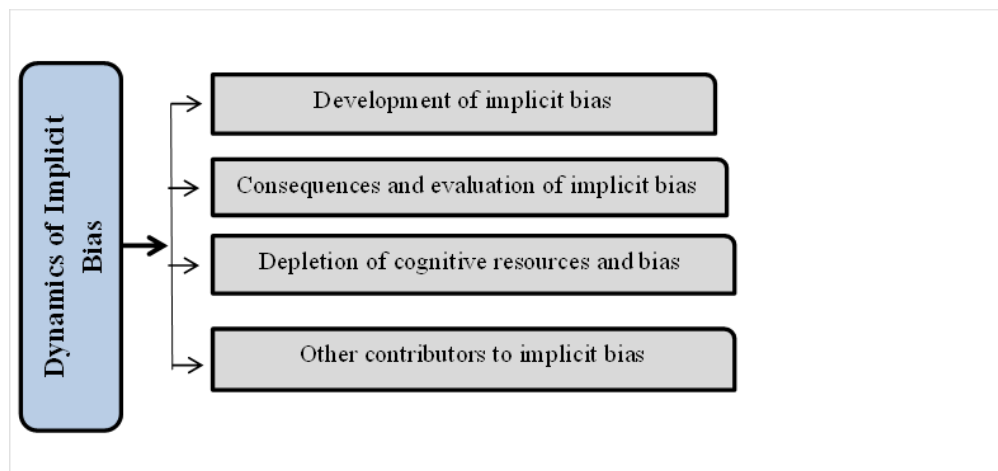


FIGURE 4.4: Subthemes of Dynamics of Implicit Bias

4.1.3.1 Development of Implicit Bias

In terms of mentioning regarding the basis of implicit bias and judgements, the police personnel indicated that such biases are not typically formed based on characteristics like dressing, religion and geographical region. However, some of them acknowledged that these biases can be developed based on factors such as age, geographical area and perceived character of an individual associated with their place of residence. This is referred to as "*Chal Chalan*" of the individual by police

personnel.

They also emphasized that in many cases biases are influenced by the behaviour of individual, particularly in their interaction with others and police officers. This was referred to as the “credibility” of judgement. Additionally, they noted that an individual’s manner of speaking which they referred as “*Aberrance*” (*Chal Dhal*) and responding to situation can also serve as basis for such biases.

4.1.3.2 Consequences and Evaluation of Implicit Bias

While mentioning regarding the impact of implicit biases the participants stated that this leads to lack of trust of police personnel on general public. As trust on general public is strained the behaviour also changes. The key ways of behavioural change is the tone become harsh, giving less time to that individual. They referred to it as

"میرا لہجہ تلخ ہو جائے گا"

“My tone will be harsh”

Some of the participants also mentioned that the bias does not influence behaviour of police personnel with general public. The police personnel also stated that when the bias is present the behaviour of police officer is not immediately affected until they evaluate the credibility of the individual based on that bias. They explained that this evaluation is conducted according to the established procedures of the police for assessing an individual’s credibility. The police personnel referred this established procedure as

"ضابطہ فوجداری"

“Criminal code”

4.1.3.3 Depletion of Cognitive Resources and Bias

Another significant factor highlighted by participants that impacts the dynamics of implicit bias is the depletion of cognitive resources among police personnel. There are three major factors highlighted by police personnel that contribute to depletion of cognitive resources thus leading to the development of implicit bias. These factors include mental exhaustion and disturbances and job related stress.

4.1.3.4 Other Contributors to Implicit Bias

The police personnel mentioned that one other factor that affects the enhancement of implicit bias is the credibility of these biases. The credibility of these biases is often impact by one key factor: the perception and behavior of general public towards police. The participants mentioned that general public holds negative perceptions regarding police. This is also highlighted in public's interaction with police. The police personal stated that

"ہم سے نفرت کرتے ہیں"

"They hate us"

The participants stated that general public always focused on the bad side of police personnel. This negative perception and the subsequent interactions contribute to the reinforcement of biases, further influencing the dynamics between police officers and general public.

These insights from the participants highlighted that the microsystem component i.e. implicit bias is not only influenced by the exosystem (job environment) of police personnel but also influence by the other components interaction within the microsystem. These also stated that the micro system of the individual also directly and collectively influence the mesosystem components such as trust and respect.

4.1.4 Interplay between Cognitive resources and Procedural Justice

The participants mentioned that procedural justice is influenced by strained and depleted cognitive resources. The participants highlighted the role of cognitive resources in key components of procedural justice such as trust, neutrality, respect and giving voice to others. The participants also stated about police personnel perspective of procedural justice. The most prominent aspects highlighted by participants is presented in figure below.

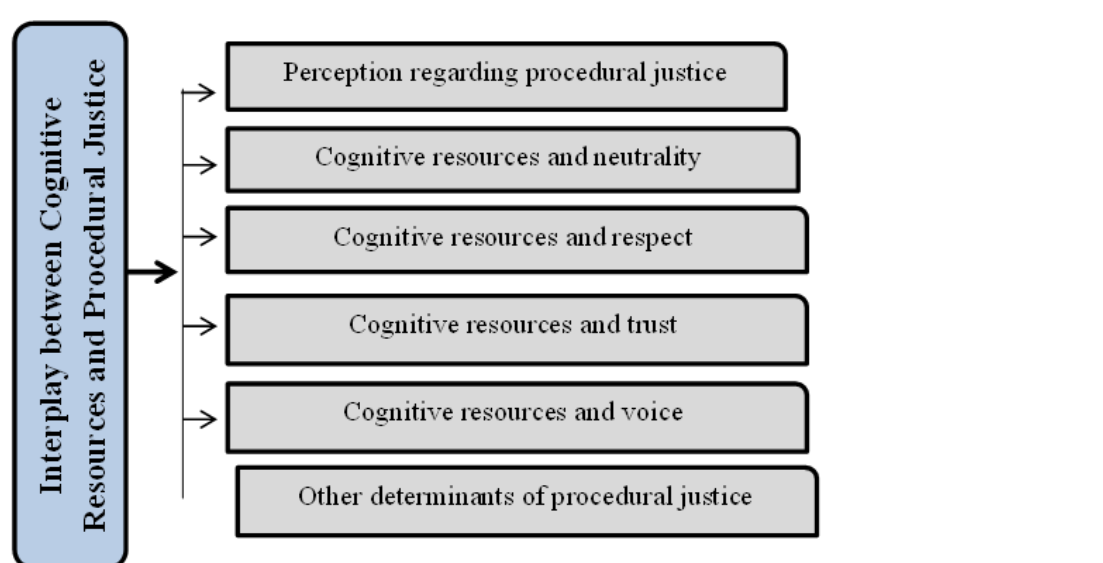


FIGURE 4.5: Subthemes of Interplay between Cognitive resources and Procedural justice

4.1.4.1 Perception regarding Procedural Justice

Most of the participants reported that they never encountered the term procedural justice. One participant even requested an explanation of the concept to better understand it. Upon receiving the explanation the participant acknowledged that there are certain circumstances that might impact justice such as when officers are given order without understanding the context or reasoning behind them.

4.1.4.2 Cognitive Resources and Neutrality

The participants mentioned that neutrality of police personnel is influenced by variety of factors. The mental tiredness is one of the primary factors reported by police personnel that significantly impacts neutrality. Mental exhaustion and strained cognitive resources such as decision making, problem solving, and memory are reported to undermine the ability of police officer to remain neutral.

However, there is degree of contradiction in participant's perception regarding the influence of cognitive resources on neutrality. Some participants suggested cognitive resources do not directly affect procedural justice; however the issues, challenges and pressure inherent in their job affect neutrality. Additionally, cognitive load was identified as another factor that affects the ability of police personnel to maintain neutrality.

4.1.4.3 Cognitive Resources and Respect

In terms of mentioning regarding the strain that impacts respectful behaviour the participants emphasized the role of mental tiredness and exhaustion. They noted that when police personnel are not mentally satisfied their ability to demonstrate respectful behaviour is automatically compromised. However, some of the participants offered a contrasting perspective, suggesting that strained cognitive resources do not significantly affect the respectful behaviour of police personnel towards general public.

4.1.4.4 Cognitive Resources and Trust

The participants said that trust component of procedural justice is significantly impacted by mental exhaustion resulting from demanding nature of police work. They also added that the mental disturbances such as stress and fatigue and the pressure associated with their job is another factor that affects trust of police personnel. When police personnel are mentally fatigued or under pressure their ability to establish trust with general public is compromised.

4.1.4.5 Cognitive Resources and Voice

The participants said that the primary factor affecting component of procedural justice is the pressure placed police personnel. This pressure is often generated by the political forces and superiors. Participants emphasized that such pressure has negative impact on this component of procedural justice, undermining the ability of police officers to maintain fairness and impartiality in their interactions.

4.1.4.6 Other Determinants of Procedural Justice

The police personnel also highlighted various other factors that impact procedural justice. It is mentioned by police officers that orders from superiors are one of the most prominent factor affecting neutrality.

Additional contributors to strained procedural justice include the personal interests of police officer, time constraints, nature of incidents, the availability of various other resources and concerns and threats over departmental reputation. They also noted that uncertainties of their job do not significantly influence the dynamics of procedural justice.

These findings highlighted that mesosystem of police personnel is not only influenced by microsystem the exosystem also plays its role. The exosystem of the police personnel also impact the components of the mesosystem. These interplay within and between the system influence police personnel as individual.

4.1.5 Interplay between Implicit Bias and Procedural Justice

The participants mentioned that implicit bias also influences the dynamics of procedural justice in several ways. These include their perceptions regarding dynamics of respect, neutrality, giving voice to others and trust. The major aspects mentioned by the regarding the interplay between procedural justice components and implicit bias among Pakistani police personnel are presented in the figure below:

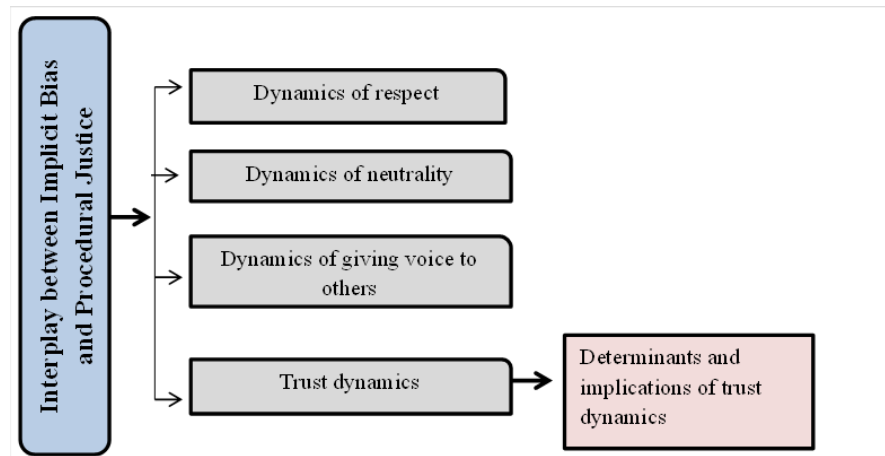


FIGURE 4.6: Subthemes and Categories of Interplay between Implicit Bias and Procedural justice

4.1.5.1 Dynamics of Respect

The participants mentioned that the dynamics of respects are influenced by biases developed based on individual's behaviour, attitude, and way of talking, credibility in society and various other factors. It is also highlighted by the participants that in addition to these factors the behaviour of the individual also plays a crucial role in shaping the behaviour of police personnel.

The police personnel stated that if an individual demonstrates respect toward police officers, they are more likely to reciprocate that respect, fostering a respectful interaction. Similarly, if the individual shows hostility or disrespect, it can lead to a breakdown in respectful behaviour from the police, affecting the overall dynamics of procedural justice

4.1.5.2 Dynamics of Neutrality

The police personnel mentioned that the neutrality might be influence; however, this bias is not primarily based on the sect, religion and area. Similarly, they also stated that the individual's characteristics such as appearance or background do not significantly affect the neutrality of police personnel. In their perspective implicit bias is often shaped by behaviour, past experiences and the perceived

credibility of individual, which may influence the interaction of police personnel with general public.

4.1.5.3 Dynamics of Giving Right of Voice

Police personnel emphasized that the biases do not affect their behaviour when it comes to allowing individuals the right to voice their opinions and express their issues. In this regard the police personnel mentioned regarding the example of protest, stating that regardless of any biases they may have towards a particular group of individual, these biases do not influence their actions in ensuring that individual are allowed to express their rights.

4.1.5.4 Trust Dynamics

The participants stated that perception of trust among police personnel differs from that of general public. Police officers typically establish trust by gathering relevant evidence and evaluating the credibility of evidence. The participants also noted that being a police officer it is particularly challenging to trust especially in matters related to their job.

This cautious approach is shaped by nature of their work, where the reliability of information and credibility of individual are crucial for making decisions. The participants also highlighted various consequences of dynamics of trust.

The major consequence highlighted by participant regarding the dynamics of trust is that when there is lack of trust due to any factor such as police personnel own judgement or credibility of the evidence; it leads to anger and irritable behaviour of police personnel towards the general public. When trust is compromised the officers may become frustrated, which can manifest in negative emotional responses and affect their interaction with general public.

These insights highlighted the interplay between the microsystem and mesosystem of police personnel. These environmental systems interact with each other to influence the police personnel attitudes, behaviours and perspectives.

4.1.6 Coping

As stress and high demands are considered as significant contributors to the challenges faced by police personnel therefore, the participants highlighted various strategies they use to cope with stress. They also mentioned that the department organize some activities to help officers manage the high demands of their job. The figure below outlines the subthemes of this theme related to coping of stress.

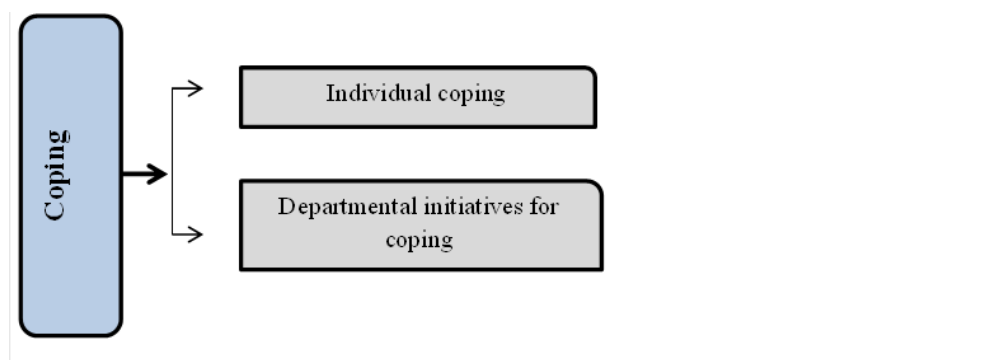


FIGURE 4.7: Subthemes of Coping

4.1.6.1 Individual Coping

In order to handle the distress and pressure of department the police personnel reported that they employ a major strategy of taking time off or spending time away from job. Other key strategy police personnel mentioned is spending time outside police station with their colleagues often enjoying tea together. In term of tea they mentioned that it helps provide a sense of relief and relaxation, allowing officers to decompress and maintain their well-being amidst the high demands of their role.

4.1.6.2 Departmental Initiatives for Coping

The police department organize some sport activities that help police personnel in relieving the stress of their environment. The participants also mentioned that in early stages of their careers, seniors or supervisors help peers in managing the job

demands and stress. These supportive interactions help new officers navigate the challenges of the job, fostering resilience and promoting mental well-being within the department.

These insights highlighted the individual characteristics of the individual also affect the environmental system in addition to interplay between the systems. These findings also showed that there is need to take initiatives at both individual and departmental level in order to enhance the overall affectivity of the department and police personnel.

4.1.7 Organizational Improvements

The participants also expressed concerns regarding ways to improve the condition within police department. They stated that such improvements not only enhance the attributes of department but also improve the productivity, work environment and behaviours of police personnel. Additionally, they emphasized that these strategies also have positive impact on general public as well. The figure below outlines the subthemes of this theme related to organizational improvements.

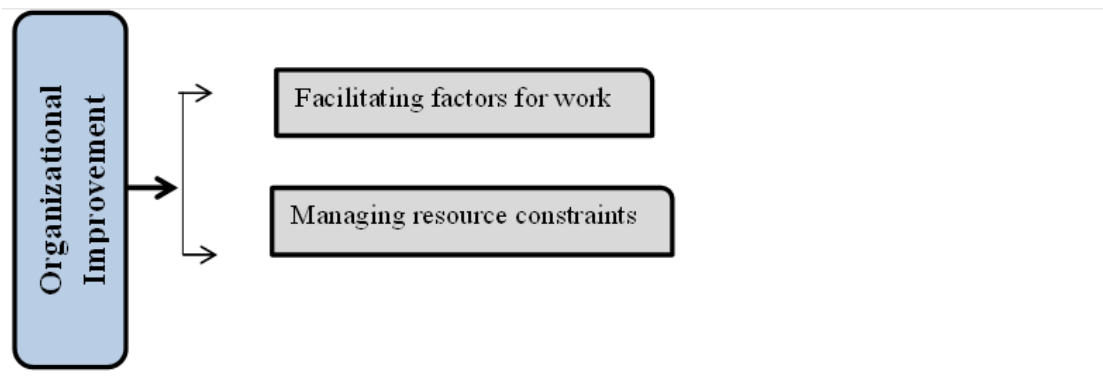


FIGURE 4.8: Subthemes of Organizational Improvements

4.1.7.1 Facilitating Factors for Work Environment

The participants also highlighted that there are certain factors that enhance the working conditions of police personnel. This enhancement of working conditions

help in enhancement of the personal attributes of police personnel such as cognitive resources and biases. The improvement of work environment revolves around the modification and management of work schedule, availability of support, and reducing the overall pressure.

4.1.7.2 Managing Resource Constraints

In terms of management of resources the major areas that require management include resources related to transportation and living facilities. As lack of transport facilities within the department impact the overall effectivity. As they said that

" گاڑیاں نہیں ہیں، گاڑیاں ہیں تو پٹرول نہیں ہے، ہم تو قعر پر کیسے جائیں گے "

"There are no vehicles, if there are vehicles, then there is no petrol, how will we go to the place of incident"

The management of living facilities is necessary for police personnel ability to work affectively as this affect individual at personal level.

These findings add to the initial hypothesized model and outline the role of exosystem components in the micro system of police personnel. The insight obtained from police personnel highlighted the role of interplay between environmental systems as well as the role of interaction within the components of different environmental system. These interactions influence Pakistani police personnel behaviours, perspective, perceptions and attitudes.

Chapter 5

Discussion

This chapter focuses on an in-depth discussion of present study objectives, procedure, results and findings. The chapter also includes the researcher's observation in the study considering the culture and context based on personal journal maintained during the study. The future implications and limitations of study are also presented in this chapter.

5.1 Discussion

Police officers are one of the most crucial and key pillar of any state (167) due to their responsibility for maintaining the safety and public order along with enforcing the laws of the state. Additionally, police department also work as preventive and investigative agent for the criminal activities (36). Policing has been subject of interest from long time across various disciplines. However, there is prominent lack of research evidence in social sciences related to the challenges faced by police officers from their perspective (168) . This gap is prominently evident in Pakistani police personnel where police force is among the most under researched populations (168; 37).

Additionally, most of the research among Pakistani police is focused on the systemic and organizational issues and policy challenges. Considering this need the

present research focused on exploring the perspective of police officers regarding interplay between their working environment, cognitive resources, implicit bias and procedural justice.

As police officers work in stressful working environment it results in influence on their physical and mental health. This results in burnout, exhaustion, aggressive behaviours and other severe psychological concerns (169)). This indicated that environmental conditions of police personnel impact the psychological, physical, cognitive and behavioural attributes (170). This adds to the existing phenomenon of ecological system theory which focuses on the impact of different environmental systems on development and behaviour of an individual.

The focus is on explaining development of an individual in a system of relationships that make up their environment (171). Therefore in the present study the interplay between three environmental systems (microsystem, mesosystem, exosystem) of the police personnel was explored from their perspective. In this study the interplay between specific characteristics of these environmental systems were explored from the perspective of Islamabad police officers.

5.1.1 Methodological Considerations

A total of 15 in-depth interviews were conducted from police personnel of different ranks working in different areas. The sample size for the in-depth interviews was calculated on the basis of saturation point. According to the existing literature to reach the saturation point in data 12-20 interviews were conducted (172). Therefore, based on these criteria the sample size of the study was selected. For conducting interviews, interview guide was developed for the major objectives of the present study.

The key aspects mentioned in the interview guide include the rapport building questions, general questions and probing questions. The interview guide was developed in Urdu language considering the nature of sample. The interviews were conducted in conversational style to foster a relaxed atmosphere that encourages

open communication from the participants. The conversational style of the interview helps in developing a comfortable environment for the participants. Therefore, encouraging participants to provide more detailed and honest responses as the setting of police station is already a major confounding. The conversational style allows for flexibility, enabling the interviewer to ask follow-up questions and explore emerging topics, which is key for understanding the essence of the participant's experiences.

Moreover, it reduces the likelihood of response bias, as participants are less inclined to provide socially acceptable answers, ensuring more genuine feedback. The natural flow of conversation also allows the interviewer to capture emotional cues and contextual information, enriching the data. The in-depth conversational style interviews help in exploring the in-depth experience, perspectives and attitudes of individual more effectively (173).

The interview of police personnel were conducted by approaching participants based on personal reference. Most of the participants gave positive response when briefed regarding the research objectives. However, some of the participants were initially hesitated and asked to read the interview guide. This initial hesitation adds to the fact that police personnel work in culture that discourages the open communication making officers reluctant to voice concerns or discuss job related stress (55).

This also highlighted that the environmental system of police personnel affect their perceptions and attitudes. In this the culture of the job i.e. the exosystem of police personnel is affecting their behaviours and attitudes. The interviews were conducted within the premises of police stations.

All the interviews were conducted within the premises of police station. The environment of police station also influence and pose some challenges during data collection. These challenges include lack of private space and interruption during the interview. These impact the duration and continuity of the interviews. Another challenge is the extreme workload of participants that also affect the data collection process to some extent.

5.1.2 Descriptive Statistics

Only male participants were interviewed. This is based on the initial exploration regarding the availability of female police personnel in police station. It was mentioned by the police personnel that in police stations the females were only called when there is requirement of female police officer in the task or duty assigned. During the interviews the similar pattern was observed by the researcher. This might be due to the fact that police departments in Asian societies are predominantly acquired by men and establishing the place of women in this department is still a struggle (174).

This limited presence of female officers in Pakistani police stations may also influence team dynamics and decision making potentially reinforcing implicit biases within police department. The existing research also suggest that the existence of gender diversity in criminal justice system contributes to variety of unique approaches in handling stress, decision making and interaction with public (175). This also indicated that the individual characteristics such as gender are key aspect in determining the role of environmental system on an individual. The interviews were conducted from the police personnel of different ranks working in different police stations of Islamabad.

The interviews were conducted with police personnel of different ranks. The ranks and work area of the participants significantly influence their perspective on the level and nature of stress within their working environment. It is also noted that the participants rank also contributes to diverse viewpoints. Additionally, years of experience plays crucial role in shaping individual attitudes and perception regarding the impact of their work environment on cognitive strain.

Police personnel with more years of experience tend to become acclimated to their working environment and do not acknowledge the role of their working environment in cognitive load and depletion of cognitive resources. This issue is also highlighted in a systematic review conducted by (155)). The research study concluded that resilience is considered as an important coping among police officers and this resilience can lead to habituation, where officers become accustomed to

stressors and may underreport or overlook their impact on well-being.

Police personnel working in areas or departments characterized by lower levels of uncertainty and fewer stressors report a relatively lesser impact of the work environment on their cognitive resources. The existing literature also suggests that the nature of police role impact the level of psychological and cognitive dysfunction (176).

5.1.3 Findings of the Study

The findings of this study highlight a number of different themes related to environmental systems of police personnel. These themes comprises of job dynamics (exosystem), dynamics of cognitive resources (microsystem), dynamics of implicit bias (interaction between components of microsystem and interaction between microsystem and exosystem) interplay between cognitive resources, implicit bias and procedural justice (interaction between mesosystem and microsystem), coping (personal characteristics of the individual) and organizational improvements (macrosystem). Thus, the findings not only highlight the interplay between systems but also focus on the interaction within the component of same environmental system to influence the police personnel.

5.1.4 Exosystem of Police Personnel

The findings of this study highlighted various components that make up the exosystem of Pakistani police personnel. These include the job characteristics, job responsibilities, job difficulties and their impact. The results indicated that these components interact with each other and their interaction affects other systems such as mesosystem and microsystem.

It is indicated that Pakistani police personnel work environment is marked with constant distress, high demands and exposure to pressure uncertain and unpredictable situations which results in physical, emotional social and cognitive toll.

The existing literature also argued that the professional challenges of police personnel influences them at various level including physical and psychological attributes (116) along with work- family challenges (177).

In this study the participants highlighted two major aspects which are influenced by the job dynamics. They highlighted that in term of cognitive aspects there are issues of memory, focus, problem solving and decision making. The existing literature also outlines the significant impact of job stressors and nature of police job on their decision making skills. Research has also indicated that stressful nature of job impact problem solving abilities (178). A research study by (179) indicated that acute and high level of stress affect problem solving abilities and creativity across variety of tasks. Cognitive abilities are influenced by high demanding job environment and work related stress. This is also indicated by a research study that these lead to cognitive impairments such as dementia (180).

The influence on psychological aspect in term of fatigue, mental exhaustion, irritability, behavioural concerns and stress was also mentioned by the participants. The existing literature also suggests that the risk of developing psychological concerns among police officers is high and variety of factors associated with their job serve as risk factor (181) . Another research study indicated that police officers work in unpredictable work setting (182) and work related stress have an impact on general health and wellbeing.

These findings also indicated that the work environment of Pakistani police personnel is shaped by variety of unique job characteristics that influence them. these findings also indicated that the environmental system of police personnel especially the exosystem which comprises of the work environment and characteristics influence not only the behaviour, development and attitude but also impact the other environmental system of police personnel.

5.1.5 Microsystem Police Personnel

In term of microsystem of police personnel two themes highlighted the interaction within the component of this system. These include dynamics of cognitive

resources and implicit bias. The findings also highlighted that the interaction with in the components of this system also leads to cognitive load, demands and mental exhaustion which in turn put strain on cognitive resources. Existing research also indicated that high cognitive demands and load can strained cognitive resources leading to decrease performance (183). The strained or depleted cognitive resources also play role in implicit bias. The existing literature outlines that when an individual is in state where cognitive resources are compromised or depleted the person is more inclined towards mental shortcuts in form of implicit biases (46) .

The findings also highlighted the interaction between the exosystem and microsystem in these emerged themes The findings also suggested that the job characteristics of police personnel, including high workload, constant pressure, long working hours and exposure to uncertainty (exosystem), significantly impact their cognitive resources (micro system). The existing literature indicated that prolong exposure to stress and sleep deprivation can affect different cognitive functions (184; 185). Another study indicated that the presence of uncertainty and ambiguity leads to slower decision making (186).

This indicated the interplay of the exosystem and microsystem of police environmental system by indicating the role of work environment, job demands and nature of work on the different aspects of cognitive load and depletion of cognitive resources such as problem solving, decision making and exhaustion. It is highlighted that the exosystem factors lead to mental exhaustion, poor decision-making, and impaired problem-solving abilities, which in turn affect their interactions with the public. The findings highlighted the role of mental exhaustion directly in giving voice to others i.e. the component of procedural justice (mesosystem).

5.1.6 Mesosystem of Police Personnel

Two major themes extracted outline the characteristics of mesosystem in present study. These include the interplay between cognitive resources and procedural justice; and interplay between implicit bias and procedural justice. These two themes

highlighted the interaction between the microsystem and mesosystem. In terms of interplay between the cognitive resources and procedural justice the findings highlighted the direct influence of strained cognitive resources on trust, respect and neutrality. In fact, the participants acknowledged that cognitive overload undermines their capacity to ensure fairness, respect, and transparency during public interactions. The existing literature also highlighted that cognitive load often enhance the influence of affect and biases on behaviour thus leading to compromised neutrality and fairness (187).

The findings also highlighted the role of implicit bias in respect neutrality and trust. This indicated that the presence and development of implicit bias due to strained cognitive resources the key components of procedural justice is undermined. The existing literature also indicated that implicit bias affects respect, trust and neutrality due to their nature of being unconscious. They operate unconsciously and influence perceptions and attitudes thus leading to compromised equality and fairness (National Initiative for Building Community Trust and Justice, 2015).

This finding shows how the mesosystem, which is the interaction between police personnel and the public, is directly affected by the interaction of microsystem thus showing the interconnected nature of these systems.

5.1.7 Role of Individual Characteristics

The findings also highlighted the role of coping in cognitive load, demands, mental exhaustion and stress induction. The existing literature also suggests that, despite challenges police officers show resilience by coping and experiencing personal growth. A research study by (188) suggested that there is an implantation of coping mechanisms into the personalities of police personnel; in fact, they begin to accept stressful situations as part of their job, which helps in increasing resilience. Police personnel reported using various coping strategies to deal with the stress and demands of their profession, such as social activities with colleagues, time off, and seeking guidance from senior officers.

5.1.8 Macrosystem of Police Personnel

The findings also highlighted one key component related to macrosystem of police personnel. The participants felt that organizational changes were necessary and urgent to improve working conditions. This finding is also highlighted in previous literature that organizational changes are necessary to bring positive influence on overall working conditions (189). This indicated that the macrosystem have influence on the exosystem and improvement in macrosystem leads to improvement in the exosystem.

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The findings of this study along with evidence from existing findings underscore important aspects of Pakistani policing. Based upon ecological systems theory, this analysis examines the interplay between a range of systems, exosystem, microsystem, mesosystem and macrosystem. The findings reconfirm ecological perspective's claim regarding the immense effects of systems in which people reside but at the same time introduce a special condition that pertains to the Pakistan policing scenario.

In conclusion, this study bridges an important gap in understanding the experiences of police personnel, particularly in under-researched contexts like Pakistan. The research provides valuable insights for both policymakers and practitioners by examining the interplay between the working environment, cognitive resources, implicit biases, and procedural justice. Future interventions should aim to reduce stressors within the exosystem while supporting individual resilience at the microsystem level, thus fostering a balanced and effective policing system that upholds justice and public trust. The findings also highlighted one key component related to macrosystem of police personnel. The participants felt that organizational changes were necessary and urgent to improve working conditions. This finding is also highlighted in previous literature that organizational changes are necessary to bring positive influence on overall working conditions (189). This indicated that the macrosystem have influence on the exosystem and improvement in macrosystem leads to improvement in the exosystem.

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Chapter 6

Conclusion

Police department in Pakistan is in a state of dysfunction due to systemic challenges, resource constraints, and operational inefficiencies. This influences its agents psychologically, cognitively, physically, and emotionally. Considering the limited attention given to the challenges of agents, this study explored the perspective of Islamabad police personnel about the role of different environmental systems on their attitudes, behaviours, and perceptions.

The findings of the study highlighted various components that make up different environmental systems of Islamabad police personnel and their influence on them. These components include job dynamics (job characteristics, job responsibilities, job difficulties, cognitive and psychological impacts of job dynamics), dynamics of cognitive resources (determinants such as cognitive load and demands, mental exhaustion, and consequences such as issues of focus, memory, problem-solving, and decision-making), contributors to strained cognitive resources, interplay between cognitive resources, implicit bias, procedural justice, coping, and organizational improvements.

These findings help in understanding the challenges of the agents related to their environmental systems such as exosystem, microsystem, mesosystem, and macrosystem. This also highlights the role of these systems on the overall attitudes and behaviors of Islamabad police officers. By integrating psychological resilience strategies and organizational support mechanisms, law enforcement agencies can

cultivate a more effective, impartial, and community-centered police force. These findings pave the way for future research and policy innovations aimed at fostering fairer and more accountable policing practices in Pakistan.

6.1 Future Implications

Following are the future implications of the present study:

1. This study provides a pathway for future exploration regarding the applicability of Ecological System theory by highlighting the role of different environmental systems in shaping police personnel perspectives, attitudes, and behaviours. Future research should focus on examining the role of different environmental systems in policing practices across diverse regions of Pakistan, particularly in rural, urban, and high-crime areas. This will help in determining the adaptability and relevance of this model in a broader context.
2. This research underscores the potential for developing ecologically-informed training programs for Islamabad police officers that focus on managing high job demands, cognitive resource depletion, and stress at the microsystem level. These programs should also incorporate exosystem factors, such as organizational resources and leadership support, resource allocation, and mental health initiatives to enhance officer well-being and performance.
3. This research highlights the need for revising and enhancing training modules and police curriculum. The findings will help in including evidence-based strategies. These training programs should also incorporate the broader influence of interactions across systems, such as support from family (mesosystem) and public trust (macrosystem), ensuring a holistic approach to police reforms.

4. This research will help policymakers to create comprehensive strategies and policies aimed at mitigating cognitive resource depletion and implicit biases. By addressing factors within multiple systems such as job-related stressors (microsystem), interdepartmental dynamics (mesosystem), and societal stereotypes (macrosystem), these policies can promote procedural justice and equitable practices.
5. This study opens avenues for further research to integrate the microsystem (cognitive resources and biases), mesosystem (interactions within the police force and community), and exosystem (organizational and societal pressures) in addressing policing challenges. Future studies can build on this framework to develop culturally and contextually sensitive solutions to the unique challenges faced by Islamabad police officers.

6.2 Limitations

Following are the limitations of the present study:

1. The present study was conducted within the premises of police stations with the presence of continuous interruptions and pressure. There was a lack of private space within police stations during data collection, which poses significant challenges and may also influence participants' responses.
2. Police personnel operate under rigorous schedules and demanding workloads, which limited the time they could dedicate to participating in the study. These time constraints may have affected the depth of responses and the richness of the data collected.
3. The present study primarily focused on exploring the role of distress in the job environment in strained cognitive resources, development of implicit biases, and dynamics of procedural justice. However, it did not account for personal distress, family responsibilities, or social demands, which may also

significantly affect police personnel's cognitive resources and procedural justice practices.

4. As convenient sampling was utilized in this study the sample might not be representative the of the population. Moreover, as the data was collected from the police stations based on convenience therefore the sample might not adequately represent the broader population of police personnel or the diversity of work environment.
5. Moreover, the participants were recruited only from Islamabad police, therefore the applicability and generalizability of the findings is limited to this region and cannot be applied to police officers from other regions of Pakistan.

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Appendix A

.1 Information Sheet

معلوماتی فارم

میں تقدیریں فاطمہ، کینٹیل یونیورسٹی آف سائنس اینڈ ٹیکنالوجی میں نفسیات کی طالبہ ہوں، اور میں آپ کو اس تحقیق میں حصہ لینے کی دعوت دینا چاہتی ہوں۔ برائے مہربانی! مندرجہ ذیل معلومات کو احتیاط سے پڑھیں۔

تحقیق کا مقصد: اس تحقیق کا مقصد ہمارے ہاں پولیس کو درپیش ذاتی مسائل کے بارے میں جانتا ہے۔ ہم اس بارے میں جاننے کی کوشش کریں گے کہ ہمارے ہاں پولیس کو درپیش آنے والے ذاتی نوعیت کے مسائل کس طرح ان کو متاثر کرتے ہیں۔

مجھے تحقیق میں حصہ لے کر کیا کرنا ہوگا؟

اس تحقیق میں حصہ لینے کے لیے آپ کی رضامندی ضروری ہے۔ اس کے بعد کچھ بنیادی معلومات کا فارم بھرنے ہوگا۔ اور پھر آپ سے تقریباً 60 منٹ تک بات چیت کی جائے گی۔

اس تحقیق کی معلومات کس طرح کام آئیں گی؟

آپ سے حاصل کردہ معلومات دونوں شکلوں (کاغذ اور کمپیوٹر) میں ذخیرہ اور محفوظ رہے گی۔ اس کے علاوہ نتائج کے نتائج ہونے پر آپ کی شناخت کو کسی بھی شکل میں ظاہر نہیں کیا جائے گا۔ اس بات چیت کو تحقیقی مقاصد کے لئے ریکارڈ کیا جائے گا۔

اس تحقیق میں حصہ لینے سے کیا ہوگا؟

اس تحقیق سے اس بارے میں آگاہی حاصل ہوگی کہ بحیثیت پولیس افسران آپ کو کن مشکلات کا سامنا کرنا پڑتا ہے وہ آپ کو کس طرح متاثر کر رہا ہے۔ اس بات کی آگاہی نظام کو بہتر بنانے میں مدد کرے گی۔

سوالات یا مزید معلومات کے لئے مجھے کس سے رابطہ کرنا چاہئے؟

کسی بھی سوال یا مسئلے کی صورت میں آپ یہاں رابطہ کر سکتے ہیں:

051-111-555-666 Ext: 178

یا

mshp231033@cust.pk

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شعبہ نفسیات، کینٹیل یونیورسٹی آف سائنس اینڈ ٹیکنالوجی، کبوتر روڈ، اسلام آباد

مددگار اداروں کا پتہ

اس تحقیق کے دوران یا بعد اگر آپ کو کسی قسم کے ذہنی تناؤ یا یادداشت کا سامنا کرنا پڑے تو نیچے موجود پتہ پر رابطہ کریں۔

Well Being Center

051-111-555-666 Ext: 296

یا

wbc@cust.edu.pk

یہاں پر آپ صبح 9 سے 5 بجے تک جاسکتے ہیں: کینٹیل یونیورسٹی آف سائنس اینڈ ٹیکنالوجی، کبوتر روڈ، اسلام آباد

Rozan Counselling Helpline

0304-1111741

helpline@rozan.org

مال سٹریٹ #228، بکریہ انگلیو، اسلام آباد

Appendix B

.2 Consent Form

اجازت نامہ

<input type="checkbox"/>	1. میں اس بات کی تصدیق کرتا / کرتی ہوں کہ مجھے اس تحقیق کے بارے میں اور اس میں ہونے والی سرگرمیوں اور طریقہ کار کے بارے میں معلومات فراہم کی گئی ہیں۔
<input type="checkbox"/>	2. میں جانتا / جانتی ہوں کہ میری شرکت رضا کارانہ ہے اور میں کسی بھی وقت بغیر کسی فائدے یا نقصان کے اپنی شرکت ختم کرنے کا حق برقرار رکھتا / رکھتی ہوں۔
<input type="checkbox"/>	3. میں سمجھتا / سمجھتی ہوں کہ میری معلومات خفیہ رہیں گی اور صرف تحقیقی مقاصد کے لئے استعمال کی جائیں گی۔
<input type="checkbox"/>	4. میں یہ بھی جانتا / جانتی ہوں کہ نتائج کے شائع ہونے پر میری شناخت کسی بھی طرح ظاہر نہیں کی جائے گی۔ میں اس تحقیق میں حصہ لینے کے لئے رضامند ہوں۔

نام _____

دستخط _____

مورخہ _____

Appendix C

.3 Demographic Sheet

ذاتی معلومات کا فارم

نمبر شمار	سوالات	جوابات
1-	آپ کا نام کیا ہے؟	
2-	آپ کی جنس کیا ہے؟	
3-	آپ کی عمر کتنی ہے؟	
4-	آپ کس علاقے میں رہتے ہیں؟	
5-	آپ کی نوکری کو کتنے سال ہو گئے ہیں؟	
6-	آپ کی نوکری کس علاقے میں ہے؟	
7-	آپ کا رینک (عہدہ) کیا ہے؟	
8-	آپ پہلے کس ڈپارٹمنٹ میں نوکری کرتے تھے؟	

9-	کیا آپ کو ڈاکٹر نے کبھی بھی صحت کا کوئی مسئلہ یا بیماری بتائی ہے؟ (اس میں عام یا موسمی بخار شامل نہیں)۔	<input type="checkbox"/> نہیں <input type="checkbox"/> ہاں	اگر ہاں تو کونسی؟
10-	کیا آپ کو کبھی کسی قسم کی ذہنی / نفسیاتی بیماری کی تشخیص کی گئی ہے؟	<input type="checkbox"/> نہیں <input type="checkbox"/> ہاں	اگر ہاں تو کونسی؟
11-	کیا آپ نے کوئی نفسیاتی مدد حاصل کی ہے؟	<input type="checkbox"/> نہیں <input type="checkbox"/> ہاں	اگر ہاں تو کونسی؟

Appendix D

.4 Interview Guide

انٹرویو گائیڈ

1. عام طور پر ایک پولیس والے کا دن کیسا ہوتا ہے؟
2. پولیس کی نوکری کے ماحول کے بارے میں آپ کی کیا رائے ہے؟
3. پولیس ڈپارٹمنٹ کا ماحول پولیس افسران کو ذہنی طور پر کس طرح متاثر کرتا ہے؟
4. پولیس سے ہمارے ہاں کس قسم کی توقعات کی جاتی ہیں؟
5. پولیس والوں کی کام کی نوعیت کس طرح ان کی ذہنی صلاحیتوں پر اثر انداز ہوتی ہے؟
6. ڈیوٹی کے دوران پولیس والوں کو کس حد تک غیر یقینی صورتحال کا سامنا کرنا پڑتا ہے؟
7. پولیس کی نوکری کے مطالبات / توقعات کس طرح پولیس افسران کے ذہنی وسائل / صلاحیتوں پر اثر انداز ہوتی ہیں؟
8. پولیس کے کام کی پریشانیوں اور غیر یقینی صورتحال کس طرح ان کی ذہنی صلاحیتوں پر اثر انداز ہوتی ہیں؟
9. پولیس کی نوکری کی غیر یقینی صورتحال کس طرح پولیس افسران کی توجہ یا فیصلہ کرنے کی صلاحیت پر اثر انداز ہوتی ہے؟
10. تشدد اور حادثات سے مسلسل سامنا کس طرح کام کے دوران پولیس افسران کے ذہنی وسائل / صلاحیتوں پر اثر انداز ہوتا ہے؟
11. کیا آپ کوئی مثال دے سکتے ہیں جہاں آپ نے محسوس کیا ہو کہ پولیس والوں کے نوکری کی نوعیت یعنی کہ غیر یقینی صورتحال ان کی سوچنے یا فیصلہ کرنے کی صلاحیت کو متاثر کر رہی ہو؟
12. پولیس کی نوکری کی پریشانیوں اور غیر یقینی صورتحال کس طرح ان کی روزمرہ کی مشکلات کو حل کرنے کی صلاحیت کو متاثر کرتی ہیں؟
13. آپ کے خیال میں پولیس افسران کا اپنی ملازمت سے ذہنی طور پر تھک جانا ان کی فیصلہ کرنے کی صلاحیت کو کیسے متاثر کرتا ہے؟
14. پولیس کی نوکری کی پریشانیوں اور غیر یقینی صورتحال کس طرح پولیس والوں کی لوگوں کے بارے میں رائے کو متاثر کرتا ہے؟
15. پولیس کی نوکری کی پریشانیوں اور غیر یقینی صورتحال کس طرح ان کے لوگوں کے ساتھ رویوں کو متاثر کرتا ہے؟
16. آپ کے خیال میں پولیس والے عام طور پر جب ذہنی تازگی یا پریشانی محسوس کرتے ہیں تو کیا ان کے فیصلے کا انحصار زیادہ تر گت / چھپی حس پر ہوتا ہے؟
17. آپ کی رائے کے مطابق کیا ذہنی تنکاوٹ اور لوگوں کے بارے میں ان کی شکل، پس منظر یا رویے کی بنیاد پر اندازے لگانے کے درمیان کوئی تعلق ہے؟

18. کیا پولیس کی نوکری کی نوعیت کی وجہ سے لوگوں کے بارے میں ان کی شکل، پس منظر یا رویے کی بنیاد پر پولیس افسران اندازے لگاتے

ہیں؟

19. آپ کی رائے کے مطابق آپ کی نوکری کی بے یقینی کی صورت حال پولیس افسران کی جانبداری کو کس طرح متاثر کرتی ہے؟

20. پولیس کی نوکری کی نوعیت کی وجہ سے عوام کے ساتھ معاملہ کرتے وقت انصاف کو یقینی بنانا آسان یا مشکل ہے؟

21. ذہنی صلاحیتوں کا متاثر ہونا کس طرح پولیس کی غیر جانبداری کو متاثر کرتا ہے؟

22. ذہنی صلاحیتوں کا متاثر ہونا کس طرح پولیس کی لوگوں پر اعتبار کرنے کی صلاحیت پر اثر انداز ہوتا ہے؟

23. ذہنی صلاحیتوں کا متاثر ہونا کس طرح لوگوں کے احترام کرنے کی عادات پر اثر انداز ہوتا ہے؟

24. ذہنی صلاحیتوں کا متاثر ہونا کس طرح پولیس والوں کی لوگوں کو ان کے حق کے لئے آواز اٹھانے کے متعلق رویوں پر اثر انداز ہوتی ہے؟

25. پولیس افسران کی لوگوں کو لوگوں کے بارے میں خود ساختہ بنائی ہوئی رائے کس طرح ان کے لوگوں کے ساتھ معاملات پر اثر انداز ہوتی ہیں؟

26. پولیس افسران کی لوگوں کے بارے میں خود ساختہ بنائی ہوئی رائے کس طرح پولیس والوں کی غیر جانبداری کو متاثر کرتا ہے؟

27. پولیس افسران کی لوگوں کے بارے میں خود ساختہ بنائی ہوئی رائے کس طرح ان کی لوگوں پر اعتبار کرنے کی صلاحیت پر اثر انداز ہوتی ہے؟

28. پولیس افسران کی لوگوں کے بارے میں خود ساختہ بنائی ہوئی رائے کس طرح ان کی لوگوں کے احترام کرنے کی عادات پر اثر انداز ہوتی

ہے؟

29. پولیس افسران کی لوگوں کے بارے میں خود ساختہ بنائی ہوئی رائے کس طرح ان کی لوگوں کو ان کے حق کے لئے آواز اٹھانے کے متعلق

رویوں پر اثر انداز ہوتی ہے؟

30. پولیس والوں کو اس کے علاوہ اپنی نوکری میں کس قسم کی مشکلات پیش آتی ہیں؟

Appendix E

.5 Observation Journal

During the study, multiple visits were conducted to police stations and field environments where Islamabad police officers operate. During these visits there are multiple observations as researcher focused on their work routines, behavioural patterns, interpersonal interactions, and systemic challenges affecting their cognitive and procedural practices. This journal outlines the observation along with personal reflection.

One of the major observations is related to the work timings and shift patterns of the police personnel. Police officers primarily work in the evenings, with irregular and extended shifts. The lack of structured shift management contributes to exhaustion, affecting their decision-making and behaviour. The erratic work schedules and extended hours create significant physical and mental strain. This depletion of cognitive resources may explain the frequent frustration and reduced patience exhibited by officers, particularly after long shifts or during prolonged crises.

Another major observation is related to their behaviours and attitudes under high stress and pressure. Police personnel tend to display rude and impatient behaviour, particularly after extended work hours or when dealing with long-standing, unresolved issues.

This behavioural shift aligns with cognitive load theory, as prolonged exposure

to stressors likely depletes cognitive control, leading to reactive and emotionally charged interactions. The inability to recover from stress appears to shape their engagement with the public and colleagues.

Another major observation is related to exhibition of biases in police interaction with general public. Police officers' attitudes and interactions exhibit implicit bias based on gender, age, socioeconomic status, residential area, and language. Women, individuals from lower socioeconomic backgrounds, and those speaking local dialects often receive different treatment compared to others. Implicit biases appear deeply embedded in police culture, influencing procedural justice principles such as neutrality and respect. These biases could be reinforced by traditional hierarchical structures, lack of training on unbiased policing, and societal norms shaping officers' perspectives.

The working conditions and infrastructure of police stations are overcrowded, disorganized, and lack proper rooms and privacy. The high-paced, chaotic environment contributes to the overall stress of personnel. A lack of adequate infrastructure further compounds the cognitive strain on officers. Without sufficient space and privacy, high-pressure decision-making and emotionally charged interactions become more challenging, exacerbating negative behaviours and procedural lapses. There are few observations related to communication style and power dynamics within police department. These include:

1. Officers often use a harsh tone, particularly in high-stress situations.
2. Gender-based discrimination is noticeable in communication patterns and delegation of duties.
3. Colleagues provide minimal support to one another, with superiors frequently issuing orders in a rude and authoritative manner.
4. Power dynamics are deeply embedded, even among colleagues, leading to internal tensions and hierarchical struggles.

The rigid, power-centric culture within the police force reinforces a hierarchical and authoritarian work environment. The lack of peer and superior support suggests an organizational culture that prioritizes hierarchy over teamwork, which

can further deplete morale, increase stress, and perpetuate implicit biases.

These observations highlight the intense cognitive, emotional, and structural pressures that define police work in Islamabad. The irregular shifts, cognitive depletion, implicit biases, and strained interpersonal relationships indicate a need for organizational reform, stress management programs, and bias-awareness training. Addressing these issues through structured policy changes and training interventions could enhance officer well-being, professionalism, and procedural justice practices in Pakistan's law enforcement system.