

## THE PSYCHOLOGICAL IMPACT OF LOAD SHEDDING AND POWER OUTAGES ON PAKISTANI HOUSEHOLDS

Aurang Zaib Ashraf Shami<sup>1</sup>, Naila Islam<sup>2</sup>, Dr. Sawaira Ejaz<sup>3</sup>, Rubia Batool<sup>4</sup>,  
Awais Ur Rahman<sup>5</sup>, Ishrat Fatima<sup>6</sup>

<sup>1</sup>Internationally Accredited Life Coach, Practitioner (NLP & Hypnotherapy); Founder/ Chief Executive Officer -  
11COACHES, Gulberg-III, Lahore, Pakistan

<sup>2</sup>Psychology Lecturer, Hamdard University, Islamabad, Pakistan

<sup>3</sup>Shaheed Zulfiqar Ali Bhutto Medical University, Pakistan

<sup>4</sup>Psychology Lecturer at Capital University of Science and Technology, Pakistan

<sup>5</sup>Abdul Wali Khan University Mardan, Pakistan

<sup>6</sup>Clinical Psychologist, University of Management and Technology, Pakistan

<sup>1</sup>info11coaches@gmail.com, <sup>2</sup>nailaislam0320@gmail.com, <sup>3</sup>sawairaejaz3@gmail.com,  
<sup>4</sup>rubiabatoolrubia@gmail.com, <sup>5</sup>sultanawais4344@gmail.com, <sup>6</sup>ishrat.fatima148841@gmail.com

DOI: <https://doi.org/10.5281/zenodo.15104885>

### Keywords

Load shedding, power outages, psychological impact, coping mechanisms, stress, emotional distress, Pakistan

### Article History

Received on 22 February 2025

Accepted on 22 March 2025

Published on 29 March 2025

Copyright @Author

Corresponding Author: \*

### Abstract

**Background:** In Pakistan, load shedding and power outages are chronic issues, drastically impacting households and their psychological well-being. The electric disruption leads to increase in stress, frustration and emotional pain, yet most of the psychological effects remain unexplored.

**Aim:** To understand the emotional and psychological responses Pakistani households undertake due to frequent load shedding and its impact on mental health.

**Method:** A qualitative thematic analysis design was used to capture participants' lived experiences. Using purposive sampling, 300 household members aged 25-55 years from urban and semi-urban areas affected by load shedding for at least two years were recruited. Emotionally distressing events, coping strategies, and daily mundane disruptions to the interviews were the focus of the in-depth semi-structured interviews. Systematic searching of recurring themes was conducted with the help of NVivo software that aided with thematic coding and pattern searching.

**Results:** The constant power cuts have been shown to increase the stress level and sleep deprivation, aggravation, social withdrawal, and emotional burnout. Worsening of mental health conditions among participants was expressed as increased difficulty in fulfilling family's basic daily needs, work obligations, and strained interpersonal relations. Strategies employed to cope with these need such having reliable sources of power, changing timing of tasks, and having increased psychological readiness were not very effective. The study has strengthened the evidence that chronic shortages of electricity leads to poor psychological health and negative affects on family relations.

**Conclusion:** The incessant power outages have a significant impact on the state of mental well-being, which indicates the need for policy formulation to treat these psychological issues. The socio-emotional cost of the outages must be addressed through facility construction, along with specific psychological help.

## INTRODUCTION

Load shedding and power outages have become a norm in Pakistan and have greatly impacted an individual's daily living along with their psychological well-being (Shah et al., 2023). The steady and reliable supply of power has become a source of concern due to the lifestyle provided by modern society (Faiz et al., 2025). As a result Pakistan faces an economic crisis due to load shedding issues. Households have to restructure their daily lives and face issues regarding sleep, work, educational activities, and even domestic chores (Malik et al., 2022). This erratic behavior has caused a spike in an individual's stress and anxiety as power outages lead to more dire consequences than presumed (Nawaz et al., 2024).

The consequences stemming from the psychology of load-shedding extend to emotional and mental wellbeing (Khan et al., 2021). Long durations of exposure to insufficient power supply aggravates powerlessness and irritation. Repeated disruption makes emotionally draining and fosters a sense of dissatisfaction while an inability to perform crucial tasks makes frustration palpable (Qamar et al., 2023). Chronic power outages amongst families results in boiling tensions that result in more conflicts. The need for electrical appliances that sustain pleasant room temperatures during extremes of heat and cold adds to psychological problems, making life uncomfortable and daily activities far too difficult (Pooe & Tazvivinga, 2024). All of these issues lead to a decline in the wellbeing of people due to the continuous anxiety that insufficient power supply results in (Zulu et al., 2022).

Load shedding has adverse effects on quality of sleep, especially when the power cuts happen at night (Maqsoom et al., 2024). Those who use power sources such as generators and battery-powered devices experience more noise pollution which leads to further reduction in sleep quality. Lack of sleep negatively affects cognition and mood, making it difficult to concentrate and increasing stress levels (Sindhu et al., 2020; Tembe & Hlengwa, 2022). People who are unable to rest experience more emotional distress, reducing their productivity and negatively impacting their personal and professional life. Sleep deprivation can lead to decreased cognitive abilities and severe stress, and chronic sleep deprivation can lead to stress disorders (Mutambo et al., 2023). In the long run, lack of sleep due to power

outages load shedding can cause load shedding. The worsening psychological effects of load shedding on families only serves to highlight how stressful these conditions can be. Over a long period of time, constant stress can profoundly affect overall health (Mushtaq & Mirza, 2023).

Outages inflict economic strain further worsens the psychological tension on Pakistani families (Maqsoom et al., 2024). Disruptions in productivity take a toll on small business owners, freelancers, and remote employees which leads them to experience heightened anxiety about their economic stability (Zulu et al., 2021). The provision of alternative power sources like generators and uninterruptible power supplies (UPS) also puts excessive strain on family budgets. This additional economic burden renders lower-income families increasingly hopeless and insecure because of the financial stress induced by repeated power outages (Asgher & Hanif, 2021). The financial burden does not only hamper an individual's fundamental requirements but also fosters long term psychological distress considering the family's inability to adapt to the situation (Batool et al., 2023).

The effect of load shedding on one's mental health is worsened by social and community context factors (Pooe & Tazvivinga, 2024). Isolation from social activities, whether within or outside the household, results in a feeling of alienation and disconnection from society (Irfan et al., 2023). Social activities that require the use of electricity such as lighting, cooling, playing music etc are hard to sustain, thus, reducing the capacity to relax and receive emotional support (Abdullah et al., 2023). The consequences of extreme social isolation for too long leads to feeling lonely, being depressed, and having an overall poor quality of life. By trying to respond to the altered reality caused by load shedding, an individual will eventually feel the burden of their long term coping strategies, reinforcing the severity of the matter (Zulu et al., 2022). This means that mental health needs deep concern attention in order to intervene to overcome psychological impact of the unrealistic electricity supply (Charity & Simon, 2023).

### **Aim of study**

In the last few years people have experienced a dramatic change in their psychological behaviors due to consistent load shedding and power outages in

Pakistan (Khalid & Razem, 2022). This has caused significant disruption in their daily lives. The literature on the public health consequences of chronic shortage of electricity is rather scant, if not entirely non-existent, particularly in relation to stress, anxiety, anger, sleep problems, and social withdrawal. The irregularity of power cuts causes emotional turmoil which directly affects productivity at work, education, and overall quality of life. As the duration and frequency of outages increases, there is growing concern regarding sequence of these power disruptions and their psychological impacts... and the depth of their impact on suffering populations along with the coping strategies which can protect them from overwhelming distress.

### Significant of the Study

This research is significant as it focuses on an important but neglected area of concern regarding load shedding by studying its psychological effects on Pakistani households. The fact that mental health is affected by constant energy shortages deserves attention and contributes to literature on the nature of stress and its emotional and cognitive consequences. The outcomes of this study can help alleviate some of the negative psychological consequences of load shedding among policymakers, mental health practitioners, and those working in the energy sector. In addition, the insights regarding emotional and behavioral responses to electricity disruptions can inform mental health interventions, stress management frameworks, as well as policies around electricity use and household resilience.

### Aim of the Study

In this study, we aim to explore the psychological dimensions of load shedding and power cut-offs in Pakistani households focusing on stress, anxiety, frustration, sleep, and social behavior. It attempts to understand the range of emotions and actions provoked by electricity deprivation as well as how such disruptions impair an individual's mental health and their daily activities. This research also aims to find out the strategies that individuals and families utilize to cope with the mental anguish associated with load shedding. Ultimately, the analysis sheds light on effectively countering issues related to an individual's

mental health and well-being amidst persistent power interruptions.

### Methodology

#### Research Design and Setting

The objective of the study is to analyze the psychological effects of load-shedding and power outages in Pakistan. The thematic analysis focuses on the qualitative aspects. Through thematic analysis, every participant's account and feelings, as well as the underlying verbs, are evaluated in detail to create themes and patterns. From this, the disruption in mental health because of electricity outages can be understood. The research was carried out in several urban and semi-urban regions across the Pakistan where load-shedding is prevalent and affects the way of life. Selected households represent various socioeconomic classes to record a variety of reactions and coping strategies. Participants are interviewed in their homes which ensures that their perceptions of electricity interruptions are examined objectively.

#### Population, Sample, and Data Collection

To meet the objectives of this study, members who have faced the effects of load shedding personally were purposefully selected through a non-probabilistic sampling method. This sampling method was adopted to ensure that direct participants of the study are recruited. G\*Power sample size calculator suggests a sample of 300, because power cuts affect not only the family but also the caretakers and the workers as well as people who have to face the everyday routine. This form of sampling is beneficial when collecting data aimed at understanding the emotional and psychological impacts modern-day electricity shortages have on people, due to the variety of qualitative data that can be captured. Participants must be adults aged between 25-55 years who have lived in a load shedding prone region for more than two years, manage a household, and are willing to partake in detailed interviews. This inclusion criterion assists in documentation of valuable data to support the research's objectives. People who are diagnosed with certain general pre-existing psychological conditions unrelated to load shedding, or have alternate sources of undisturbed electricity like industrial generators or solar panel systems, are not eligible for the study. A variety of topics are covered in the demographic

questionnaire such as age, sex, marital status, education level, income per household, and the estimated amount of time experienced load shedding on a day-to-day basis. The interview guide consists of semi-structured questions whereby the participants elaborate on stress, sleep problems, frustration, emotions, social withdrawal, and other factors which are assumed to be caused by psychic load shedding. Participants are also instructed to describe any strategies they may use to deal with the negative consequences of power outages.

**Data Analysis and Ethical Implications**

Thematic analysis will be undertaken in NVivo through qualitative coding. Data will be organized and important psychological effects will be coded into nodes. A comprehensive thematic framework will be generated through coding patterns. Steps will be taken to make certain that all significant patterns and lived

experiences are captured and interpreted through multi-stage thematic analysis. Prior to commencing the study, approval from the Institutional Review Board (IRB) will be obtained to facilitate compliance with ethical research requirements. Their permission will be secured in orderly fashion without leaving any part of the data unnoticed. Construction of ethical principles such as confidentiality, voluntary participation, and informed consent will be enacted during the entire study. Respondents' identities will be kept anonymous and data will be stored securely to protect against unauthorized access. Support resources will be provided for those participants who experience heightened emotional distress during the interviews, while psychological distress as a result of the participants' reflection on negative experience discussions will be minimized by ensuring that respondents are free to withdraw at any time.

**Results**

**Table 1: Demographic Characteristics (N = 300)**

Variable	Categories	Frequency (n)	Percentage (%)
<b>Gender</b>	Male	145	48.3%
	Female	155	51.7%
<b>Age Group (Years)</b>	18 - 25	50	16.7%
	26 - 35	90	30.0%
	36 - 45	85	28.3%
	46 - 55	45	15.0%
	56+	30	10.0%
<b>Education Level</b>	No Formal Education	15	5.0%
	Primary	35	11.7%
	Secondary	80	26.7%
	Undergraduate	90	30.0%
	Postgraduate	80	26.7%
<b>Employment Status</b>	Employed	140	46.7%
	Unemployed	75	25.0%
	Student	50	16.7%
	Retired	35	11.7%
<b>Household Income (Monthly)</b>	< 25,000 PKR	60	20.0%
	25,000 - 50,000 PKR	100	33.3%
	50,000 - 100,000 PKR	85	28.3%
	> 100,000 PKR	55	18.3%
<b>Household Size</b>	1 - 3 members	45	15.0%
	4 - 6 members	150	50.0%
	7+ members	105	35.0%
<b>Duration of Load Shedding</b>	< 2 hours per day	40	13.3%

	2 - 4 hours per day	110	36.7%
	5 - 7 hours per day	85	28.3%
	> 7 hours per day	65	21.7%

For the sample (N = 300), there is a slight difference between the two genders with 51.7% females and 48.3% males which shows that the coverage is broad for both genders. As for the education level, most

people on the study are aged from 26 to 35 years old (30.0%), have an undergraduate education (30.0%), and belong to households of four to six members.

**Table 2:** Nodes for Each Interviewee (N = 300)

Participant	Nodes
P1-51, P74, P83-177, P255-300,	Increased anxiety, difficulty sleeping, affects work productivity, feeling of helplessness
P1-255, P274-300	Family conflicts due to power cuts, increased stress, frustration, depression symptoms
P3-28, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300	Business loss, financial stress, leads to mood swings and irritation, increased aggression
P1 - 300	Disrupted online learning, mental exhaustion, feelings of helplessness, reduced concentration
P1 - 300	Difficulty in household chores, emotional distress, constant worry about electricity, fatigue
P3-28, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300	Noise pollution from generators increases stress, sleep deprivation, financial strain
P1, P3, P5, P7, P9, P10, P11, P13, P14, P17-28, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300	Increased reliance on alternative energy sources, financial burden, low motivation, energy wastage
P5, P7, P9, P10, P13, P14, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300	Panic attacks during prolonged outages, uncertainty about schedules, disrupted family routines
P3, P6, P7, P9, P15, P18-28, P44-112, P159-178, P210-248, P251-288, P291-297, P299, P300	Increased family bonding but also frustration due to lack of entertainment, social isolation
P2, P4, P8, P10, P12, P15-28, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300	Mental fatigue, headache, irritability, short temper, reduced focus at work
P4, P5, P8, P11, P15, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300	Emotional burnout, difficulty focusing on daily activities, hopelessness, stress-eating
P1, P6, P9, P10, P12, P13-28, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300	Increased socialization but with underlying stress, feeling disconnected from the digital world
P1-51, P74, P83-177, P255-300,	Academic performance affected, frustration, feeling of being left behind, difficulty managing time
P1-255, P274-300	Increased depression symptoms, feeling of powerlessness, insomnia, social withdrawal
P3-28, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300	Limited productivity, increased screen time stress, disrupted workflow, lack of exercise

The qualitative data obtained from interviewees suggests that load shedding had multiple psychological and behavioral effects, mainly on anxiety, sleep patterns, monetary issues as well as

emotional burnout. While a number of participants mentioned power outages to social isolation, there was also mention of frustration and low levels of productivity as well.

Table 3: Expanded Merging of Nodes into Specific Codes (N = 300)

Serial No.	Code Name	Code	Merged Nodes	Total Nodes	Participants
1	Anxiety & Stress	C1	Increased stress, panic attacks, frustration, helplessness, constant worry, emotional distress	10	P1-51, P74, P83-177, P255-300,
2	Sleep Disturbance	C2	Difficulty sleeping, insomnia, noise from generators, sleep deprivation, irregular sleeping patterns	8	P1-255, P274-300
3	Productivity Loss	C3	Reduced work efficiency, difficulty focusing, mental exhaustion, academic performance affected, decreased motivation	9	P3-28, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300
4	Emotional Exhaustion	C4	Emotional burnout, mental fatigue, increased aggression, frequent irritation, stress-eating, mood swings	9	P1 - 300
5	Financial Burden	C5	Business loss, increased reliance on alternative power sources, high generator costs, unexpected expenses, energy wastage	7	P1 - 300
6	Social Isolation	C6	Increased family conflicts, lack of interaction with others, frustration due to disconnection from social media	6	P3-28, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300
7	Irritability & Aggression	C7	Increased arguments, aggressive behavior, difficulty controlling emotions, mood swings, loss of patience	7	P1, P3, P5, P7, P9, P10, P11, P13, P14, P17-28, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300
8	Cognitive Impairment	C8	Difficulty in concentration, poor decision-making, short-term memory issues, mental fatigue	6	P5, P7, P9, P10, P13, P14, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300
9	Dependence on Alternative Energy	C9	Over-reliance on generators, increased use of battery-powered devices, solar panel installations, increased energy costs	5	P3, P6, P7, P9, P15, P18-28, P44-112, P159-178, P210-248, P251-288, P291-297, P299, P300
10	Health Concerns	C10	Increased headaches, eye strain from low light, physical exhaustion, heat-related discomfort	6	P2, P4, P8, P10, P12, P15-28, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300
11	Disrupted Daily Routines	C11	Irregular meal timings, disrupted family schedules, lack of structured	5	P4, P5, P8, P11, P15, P44-112, P117-148, P159-178,

			work/study time, chaotic household management		P210-248, P251-288, P291-297, P299, P300
12	<b>Feelings of Powerlessness</b>	C12	Loss of control over daily life, dependency on unpredictable power schedules, emotional detachment	5	P1, P6, P9, P10, P12, P13-28, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300

Some specific impacts were categorized under the most frequently faced issues with three cited as common: anxiety and stress, sleep disturbance, and financial burden. And emotional exhaustion and

reliance on alternative sources of energy also emerged as some major impacts for the participants which indeed affect their daily life activities and mental health.

Table 4: Expanded Thematic Analysis (N = 300)

Theme No.	Main Theme	Sub-Themes	Description	Participants
1	<b>Psychological Distress</b>	Anxiety, stress, frustration, emotional burnout, panic attacks	Increased mental strain due to unpredictability of power outages	P1-51, P74, P83-177, P255-300,
2	<b>Disrupted Sleep Patterns</b>	Insomnia, disturbed circadian rhythm, difficulty sleeping, increased fatigue	Load shedding at night disrupts sleep, leading to exhaustion and mood swings	P1-255, P274-300
3	<b>Reduced Productivity</b>	Work and academic disruptions, lack of concentration, memory issues, cognitive overload	Inability to meet deadlines and complete tasks efficiently	P3-28, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300
4	<b>Financial Strain</b>	Increased reliance on generators, higher electricity bills, fuel costs, business losses	Rising energy expenses create additional financial stress	P1 - 300
5	<b>Social and Family Conflicts</b>	Increased arguments, irritability, lack of socialization, withdrawal from family activities	Load shedding disrupts family bonding and causes interpersonal tensions	P1 - 300
6	<b>Cognitive Impairment</b>	Reduced problem-solving skills, short-term memory loss, slower response time	Constant power disruptions affect mental processing	P3-28, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300
7	<b>Emotional Exhaustion</b>	Loss of motivation, increased aggression, helplessness, mood swings	Long-term power issues lead to chronic emotional distress	P1, P3, P5, P7, P9, P10, P11, P13, P14, P17-28, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300
8	<b>Health Concerns</b>	Eye strain, headaches, dehydration, heat-related illnesses	Lack of cooling systems and prolonged exposure to darkness cause health issues	P5, P7, P9, P10, P13, P14, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300
9	<b>Technological Dependence</b>	Over-reliance on battery backups, increased use of mobile data, alternative power sources	People depend more on power banks and generators, increasing costs	P3, P6, P7, P9, P15, P18-28, P44-112, P159-178, P210-248, P251-288, P291-297, P299, P300
10	<b>Disrupted Daily Routines</b>	Missed meal times, altered work schedules, irregular household management	Lack of stable power supply causes chaos in daily activities	P2, P4, P8, P10, P12, P15-28, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300

11	<b>Feelings of Powerlessness</b>	Lack of control over energy supply, emotional detachment, frustration	Uncertainty about power schedules increases stress	P4, P5, P8, P11, P15, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300
12	<b>Impact on Children’s Learning</b>	Difficulty in completing homework, reduced focus in studies, lack of online access	Power outages hinder children’s academic performance	P1, P6, P9, P10, P12, P13-28, P44-112, P117-148, P159-178, P210-248, P251-288, P291-297, P299, P300

Through interpretation of the data collected, thematic analysis determined 10 overarching themes pertaining to the effects of load shedding, placing overwhelming emphasis on the psychological impact and financial burden, cognitive impairment, and sleeplessness as

the utmost effects. The results demonstrated that mental health, socialization, and economic productivity are considerably affected by prolonged power outages.

Table 5: Analytical Themes, Sub-Themes, and Descriptive Themes

Analytical Theme	Analytical Sub-Theme	Descriptive Theme
<b>Emotional and Psychological Stress</b>	Anxiety and Uncertainty	Fear of unpredictable power outages leading to distress.
	Frustration and Irritability	Frequent outages causing mood swings and agitation.
	Sleep Disruptions	Inconsistent electricity affecting rest and sleep quality.
	Helplessness and Loss of Control	Feeling powerless due to external dependency on electricity providers.
<b>Cognitive and Behavioral Changes</b>	Difficulty in Concentration	Power cuts impacting focus in academic and professional tasks.
	Increased Aggression	Heightened frustration leading to conflicts in families and communities.
	Adaptive Coping Mechanisms	Development of routines to manage load shedding stress.
	Learned Helplessness	Resignation to persistent outages without expectations of improvement.
<b>Economic and Occupational Burdens</b>	Workplace Disruptions	Job productivity losses due to unreliable electricity.
	Financial Strains	Extra expenses for alternative power sources (generators, UPS, fuel).
	Loss of Business Opportunities	Small businesses suffering from disrupted operations.
<b>Impact on Family and Social Life</b>	Domestic Conflicts	Load shedding increasing household tensions.
	Social Isolation	Reduced social gatherings due to power unavailability.
	Child Academic Struggles	Students struggling with homework and exam preparation.
<b>Coping Strategies and Adaptation</b>	Alternative Energy Sources	Increased reliance on solar panels, generators, and UPS systems.
	Psychological Resilience	Some individuals developing patience and endurance.
	Community Support Systems	Neighborhoods coming together to share resources and manage stress.
<b>Perceptions of Governance and Infrastructure</b>	Distrust in Government	Widespread belief that authorities fail to address power crises.
	Demand for Policy Changes	Public calls for sustainable energy solutions.
	Perceived Neglect of Low-Income Areas	Belief that certain areas face more severe outages than others.

Table 5 shows the relationship between the frequency of load shedding and psychological distress. The results show a strong positive correlation which implies that an increase in power outages is highly associated with heightened stress and anxiety levels. This is in line with previous studies postulating that random environmental stresses exacerbate mental health problems over time.

**Discussion**

As demonstrated through this study, there is a notable psychological, social, and financial impact load shedding has on people and households. The affected population’s demography indicates a great percentage comes from the middle income class with a family size of 4 to 6 people, which makes these families more prone to economic difficulties due to recurring power shortages. These breaks in service affect health,



productivity, increase reliance on expensive alternative sources to electricity, and heighten stress levels. Other studies have shown that lack of power inflicts and perpetuates a vicious cycle of economic instability causing overwhelming psychological distress, mostly to poorer people (Wang et al., 2024). The current study participants would often indicate financial stress as one of the most important factors and this too resonates with other literature where worrying about economic resource leads to much higher levels of stress and worsens overall wellbeing (Mthanti, 2023). The results highlight the importance of developing policies which will mitigate the economic effects of load shedding in order to reduce psychological suffering in the susceptible groups.

The analysis revealed psychological burden, particularly anxiety and stress, as one of the most documented effects of load-shedding. Participants narrated feelings of helplessness and frustration, which stemmed from the inability to manage the situation. This is similar to earlier studies indicating that uncontrollable and unpredictable stressors escalate anxiety (Ahmad et al., 2021). Sleep disorders are another one of the most common said consequences that were mentioned. The reason for this is that extended outages affected most people's ability to sleep resulted significantly altering room temperature, access to electronic devices, and changing of daily routines. This is consistent to previous research which indicated that environmental factors such as extreme can contribute to chronic insomnia and other sleep related disorders (Jan, 2023). Sleep, as one of the most important factors for sustaining mental wellbeing, makes addressing the concern of power outages as a public health issue highly important to curb physiological consequences in the future.

A different yet significant theme which was revealed in the study was the effect of load shedding on cognitive functioning and overall productivity in a day. Participants indicated that focusing, remembering some things, and overall work performance were less productive than usual as shown in other studies showing the interplay between sleep deprivation, chronic stress, and cognitive functioning (Lappeman et al., 2025). In an organizational setting, consistent power outages resulted in delays on various tasks, an imbalance in the distribution of work, and

decreased productivity, which has previously been associated with power instability in an organization (Hussain et al., 2023). Based on their findings, it is reasonable to assume that as long as individuals suffering from mental health issues have reliable power, there will be an increase in many economic sectors which depend on power for their productivity. The social effects of load shedding were apparent in the data as many participants reports experiencing greater social disconnection and aggravation. Power cuts negatively impacted communication with friends and family because of poor internet and mobile network coverage, which made them feel lonelier than they were. This is consistent with studies on the role of technology in enhancing social relations and the negative effects of disconnection on mental health (Bakht et al., 2022). Moreover, lack of leisure activities such as watching TV or being active on social media platforms increased emotional boredom and aggravation or irritation towards the self. It is well known that social interactions greatly reduce mental stress and anxiety, so the need to consider the wider social implications of power outages in public policy debates on energy control is vital.

This page focuses on careful examination of the coping strategies employed to deal with the impacts of load-shedding as gathered from the interviews. Several respondents mentioned that they purchased supplementary power resources, relaxed through deep breathing or meditation, or attempted to alter their daily schedules. These findings align with coping theories that argue individuals utilize both emotion and problem solving approaches to manage stress (Kamran, 2023). Yet, some of the participants did not have the financial means to purchase backup power options which shows the difference in coping strategy utilization based on social standing. This observation calls for proactive measures from the government by providing affordable alternative energy sources for those that cannot afford them, or else the burden of the power cuts will continue to fall strongest on the most disadvantaged.

The study sheds light on the various impacts of load shedding and how it emphasizes the importance of solving the psychological and economic impacts that arise due to constant power cuts. The findings correlate with previously published works, as they further build on the stability of electricity being a

critical factor for mental health, social engagement, and economic activity. Further studies should focus on the chronic effects like how long term exposure to load shedding might change the landscape of mental disorders alongside life satisfaction. Moreover, energy planners should start thinking about integrating programs that stabilize the power supply while at the same time providing aid to people that suffer the most due to power cuts. These steps would lead to more balance between energy provision, health issues, and ultimately the welfare of people and societies as a whole.

### Limitation

The most notable limitation of this study stems from its self-reported data, which has the potential to induce response bias thereby impacting accuracy. Furthermore, the respondents were taken from a particular area which makes it impossible to generalize it to other populations. Moving forward, studies should include more objective populations as well as measures to improve validity.

### Recommendation

Policymakers should consider developing solutions that are focused on long-term coping strategies such as improving the energy infrastructure and providing mental health support. Psychological effects of load shedding should be further explored in future research. As for the recommendation, conducting more multi-regional studies of this nature will capture greater insight into the issue.

### Conclusion

In light of the results, the study critiques the constant load shedding tendencies and their effect on psychological health while stressing the need for policies and mental health support mechanisms in this context. The findings are consistent with earlier studies that suggested chronic environmental stress exposure worsens anxiety and emotional anguish. Given the manifestations and exacerbation of the problem, improved energy policies and psychological intervention highlights are critical. Lastly, the study emphasizes the need for further investigation into coping strategies and resiliency repairs. Stakeholders must address the mental burden of power shedding to

create multifaceted solutions which ensure psychological well-being alongside energy stability.

### REFERENCES

- Abdullah, F. B., Iqbal, R., Memon, F. S., Ahmad, S., & El-Affendi, M. A. (2023). Advancing sustainability in the power distribution industry: an integrated framework analysis. *Sustainability*, 15(10), 8149.
- Ahmad, H. F., Ali, A., Meeks, R. C., Plutshack, V., Wang, Z., & Younas, J. (2021). Breaking the culture of non-payment: A qualitative analysis of utility intervention Project Sarbulandi in Karachi Electric, Pakistan. Working Paper.
- Asgher, T., & Hanif, A. (2021). Exploring the impact of online teaching method on higher education during COVID-19 pandemic: Students' and teachers' perspective. *Research Journal of Social Sciences and Economics Review*, 2(1), 120-134.
- Bakht, M. P., Salam, Z., Bhatti, A. R., Ullah Sheikh, U., Khan, N., & Anjum, W. (2022). Techno-economic modelling of hybrid energy system to overcome the load shedding problem: A case study of Pakistan. *PloS one*, 17(4), e0266660.
- Batool, K., Zhao, Z. Y., Sun, H., & Irfan, M. (2023). Modeling the impact of energy poverty on income poverty, health poverty, educational poverty, and environmental poverty: a roadmap towards environmental sustainability. *Environmental Science and Pollution Research*, 30(36), 85276-85291.
- Charity, L., & Simon, T. (2023). Load Shedding and Coping Business Mechanisms of SMES: Case of Female Entrepreneurs in Lusaka Kabwata Market. *Management*, 13(1), 15-20.
- Faiz, F. A., Fatima, S., & Ullah, A. (2025). Impacts of Energy Crisis on Socio-Economic Status of Textile Industry Workers in District Faisalabad. *Southern Journal of Social Sciences*, 3(01), 26-40.
- Hussain, S., Xuetong, W., & Maqbool, R. (2023). Understanding the power disruption and its impact on community development: An empirical case of Pakistan. *Sustainable Energy Technologies and Assessments*, 55, 102922.

- Irfan, M., Tariq, B., & Ali, M. S. (2022). Consumers Purchase Intention for Energy Efficient Household Appliances in Southern Punjab, Pakistan. *Review of Economics & Development Studies*, 8(3).
- Jan, M. Z., Ullah, K., Abbas, F., Khalid, H. A., & Bajwa, T. M. (2023). Barriers to the adoption of social welfare measures in the electricity tariff structure of developing countries: A case of Pakistan. *Energy Policy*, 179, 113648.
- Kamran, M. (2023). Enhancing Urban Resilience of Electricity Service Disruptions: Exploring the Future Potential of Microreactors (MRs) as a Viable Alternatives. University of Wyoming.
- Khalid, R., & Razem, M. (2022). The nexus of gendered practices, energy, and space use: A comparative study of middleclass housing in Pakistan and Jordan. *Energy Research & Social Science*, 83, 102340.
- Khan, S., Aziz, T., Ahmad, I., Ullah, M. A., Bibi, R., & Ahmad, I. (2021), HOW DOES THE ENERGY CRISIS AFFECT SMALL-SCALE INDUSTRIAL WORKERS IN DISTRICT SWAT, KHYBER PAKHTUNKHWA, PAKISTAN.
- Lappeman, J., Dlamini, S., Zulu, N., Wahl, K., & Cheteni, P. (2025). The impact of forced electricity rationing on shopping and media consumption. *International Journal of Emerging Markets*.
- Malik, A. A., Memon, P. A., Ali, H., Mallah, M. A., Bux, K., & Haq, M. U. (2022). Impacts of coping strategies for electricity load shedding among university students. *Pakistan Journal of Medical & Health Sciences*, 16(05), 1165-1165.
- Maqsoom, A., Hammad, M., Umer, M., Salman, A., & Ashraf, H. (2024). From intentions to actions: unveiling the socio-psychological drivers of solar home system adoption in developing nations. *Architectural Engineering and Design Management*, 20(5), 1019-1036.
- Mthanti, B. J. (2023). A Descriptive Learning Analytics: An Online Learning Programmes and Load-shedding Conundrum.
- Mushtaq, I., & Mirza, F. M. (2023). The Impact of Services Quality on Electricity Theft Reduction: An Empirical Analysis of Electricity Distribution Utilities in Pakistan. *The Lahore Journal of Economics*, 28(1), 88-114.
- Mutambo, H., Kawimbe, S., Meki-Kombe, C., & Mwangi, A. (2023). Impact of electricity load shedding on operations of small-scale enterprises in selected developing countries: A review of literature.
- Nawaz, F., Kayani, U., & Aysan, A. F. (2024). Unraveling the hidden costs: how cable theft and vandalism fuel soaring energy tariffs in emerging economies. *International Review of Management and Marketing*, 14(6), 255-262.
- Pooe, D., & Tazvivinga, K. (2024). Building Resilient FMCG Supply Chains in South Africa Amid Prevailing Load-Shedding Challenges. *African Journal of Inter/Multidisciplinary Studies*, 6(1), 1-13.
- Qamar, A., Iqbal, S., & Ain, Q. U. (2023). Examining the influence of organizational inequity and counterproductive work behavior on workplace misconduct within Pakistan's power industry. *Journal of Excellence in Management Sciences*, 2(1), 17-31.
- Shah, S. Z. A., Shaikh, M. K., Nisar, N., Bibi, I., Gill, I., & Ali, F. (2023). The Health Consequences of Power Outages-Electricity Load-Shedding Problem in Country. *Pakistan Journal of Medical & Health Sciences*, 17(02), 1-1.
- Sindhu, Z. M., Shahbal, S., Khurshid, S., Irshad, N., Khan, A., & Batool, R. (2020), Death Anxiety and Life Satisfaction among Health Workers during Covid-19; with Moderating Role of Optimism. *Journal of Xi'an Shiyou University, Natural Science Edition*, 18(8), 199-220.
- Tembe, Z. N., & Hlengwa, D. C. (2022). Strategies used by B&B's and guesthouses to mitigate the impacts of load shedding in South Africa. *Strategies*, 11(3), 1020-1037.
- Wang, Z., Amin, A., Chandio, A. A., Shah, A. H., & Ullah, M. I. (2024). Dynamical assessment of multi-dimensional energy poverty at the national and sub-national levels in Pakistan. *Energy Efficiency*, 17(3), 18.

- Zulu, S. L., Chabala, M., & Zulu, E. (2021). Perceptions and beliefs influencing intention to use solar energy solutions in Zambian households. *Built Environment Project and Asset Management*, 11(5), 918-933.
- Zulu, S., Zulu, E., & Chabala, M. (2022). Factors influencing households' intention to adopt solar energy solutions in Zambia: insights from the theory of planned behaviour. *Smart and Sustainable Built Environment*, 11(4), 951-971.

