EFFECT OF WORK-RELATED STRESS ON MENTAL HEALTH AMONG AVIATION PROFESSIONALS: A CASE OF AIRCRAFT LEASING SERVICES LIMITED, NAIROBI, KENYA

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A Thesis Submitted in Partial Fulfilment of the Requirements for the Award of the Degree of Master of Arts in Counseling Psychology in the Department of Counseling Psychology and the School of Humanities and Social Sciences of Africa Nazarene University

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DECLARATION

I declare that this document and the research that it describes are my original work and that they have not been presented in any other university for academic work.

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DEDICATION

This work is dedicated to God Almighty, whose grace, wisdom, and strength have guided me throughout this academic journey.

To my late father, George Odhiambo, whose legacy continues to inspire me; my mother, Grace Atak, for her unwavering support, love, and prayers; my sister, Nina Omondi, for her encouragement and belief in my potential; and my younger brother, Wilson Atak, whose presence brings joy and meaning to my life.

To my life partner, Sidney Ugi, for your steadfast love, patience, and emotional support throughout this journey. Your presence has been a source of strength, encouragement, and motivation, and I am deeply grateful to you.

I also dedicate this project to all aviation professionals who serve diligently in high-demand environments. May this study contribute to promoting mental health awareness and enhancing well-being within the aviation industry.

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ABSTRACT

This study examined the relationship between work-related stress and mental health among aviation professionals at Aircraft Leasing Services Limited, Nairobi, Kenya. Specifically, the study sought to determine the effect of workload-related stress on mental health; establish the association between work–life balance-related stress and mental health; investigate the effect of work environment-related stress on mental health; and analyze the association between job demand-related stress and mental health among employees at Aircraft Leasing Services Limited. The study was guided by Allostatic Load Theory, Work–Family Conflict Theory, Psychosocial Safety Climate Theory, and Role Stress Theory. A mixed-methods approach based on a descriptive case study design was adopted. Quantitative data were collected from 158 respondents selected through stratified random sampling from a target population of 392 employees, comprising 93 (58.9%) males, 63 (39.9%) females, and 2 (1.2%) respondents who preferred not to disclose their gender. The qualitative phase involved 12 purposively selected participants who reported relatively high levels of work-related stress and participated in semi-structured interviews to provide deeper insight into the quantitative findings. Data were collected using structured questionnaires and interview guides. Reliability was assessed using Cronbach's alpha, while validity was established through expert review. Quantitative data were analyzed using descriptive statistics, correlation, and multiple regression in SPSS version 26, while qualitative data were analyzed thematically. The findings revealed that workload was negatively associated with mental health ($\beta = -0.483$, $p < .001$), while work–life balance ($\beta = 0.362$, $p < .001$), work environment ($\beta = 0.356$, $p < .001$), and role clarity ($\beta = 0.209$, $p < .001$) were positively associated with mental health. Workload recorded the strongest association among the study variables. Qualitative findings indicated that time pressure, demanding schedules, limited recovery periods, and workplace support systems were key issues influencing employees' psychological well-being. The study concludes that workplace conditions are significantly associated with mental health among employees at ALS Ltd. It recommends improved staffing levels, realistic scheduling, supportive work environments, and enhanced role clarity to promote employee well-being.

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DEFINITION OF TERMS

Job demand-related stress: Refers to stress associated with role-related job requirements. In this study, it denotes employees' perceptions of role clarity, task conflict, autonomy, and involvement in work-related decisions at Aircraft Leasing Services Limited, Nairobi.

Mental health: A state of cognitive, emotional, and social well-being. In this study, mental health refers to the psychological well-being of aviation professionals at Aircraft Leasing Services Limited, Nairobi, as measured using the General Health Questionnaire (GHQ-12).

Work environment-related stressors: Factors within the organizational and social work setting that may influence employee well-being. In this study, work environment-related stressors refer to supervisor and colleague interactions, workplace relations, and communication and feedback processes at Aircraft Leasing Services Limited, Nairobi.

Work–life balance-related stress: Stress arising from the interaction between work responsibilities and personal life demands. In this study, it refers to employees' experiences regarding time allocation between work and personal life, rest time, and personal time at Aircraft Leasing Services Limited, Nairobi.

Workload-related stress: Stress associated with the quantity and pace of work required to perform job responsibilities. In this study, workload-related stress refers to employees' perceptions of task volume, work pace, and break availability at Aircraft Leasing Services Limited, Nairobi.

ABBREVIATIONS AND ACRONYMS

ALS Ltd.: Aircraft Leasing Services Limited

ANU: Africa Nazarene University

DV: Dependent Variable

GHQ-12: General Health Questionnaire-12

ICAO: International Civil Aviation Organization

IV: Independent Variable

JD-R Model: Job Demand-Resources Model

KCAA: Kenya Civil Aviation Authority

NACOSTI: National Commission for Science, Technology, and Innovation

NVivo: Qualitative Data Analysis Software

SPSS: Statistical Package for the Social Sciences

WRSQ: Work-Related Stress Questionnaire

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

According to the World Health Organization (2022), mental health is a state of well-being in which individuals realize their abilities, can cope with the normal stresses of life, work and learn productively, and contribute to their communities. Mental health encompasses emotional, psychological, and social well-being, which influence how individuals think, feel, and behave. It is not merely the absence of mental illness but a positive state that enables individuals to function effectively in their personal, social, and professional lives (World Health Organization, 2022). In contrast, the World Health Organization (2023) describes stress as a psychological state that arises when a person feels they can't handle the obligations placed on them. Although stress can occasionally be helpful, prolonged or severe stress is dangerous. Work-related stress refers to a state of psychological and physical strain that occurs when workplace demands exceed an employee's ability or available resources to cope effectively with those demands (Conceição et al., 2025). In the aviation sector, this phenomenon is often associated with long working hours, fatigue, unpredictable schedules, and challenges in maintaining work–life balance. These conditions may contribute to anxiety, emotional exhaustion, and reduced psychological well-being among aviation professionals.

Workplace conditions play an important role in employee mental health. Workload, which refers to the quantity and intensity of tasks performed within a given period, has been associated with burnout, fatigue, and lower job satisfaction when employees perceive work demands as exceeding their available resources and capacity to cope (Hung et al.,

2025). Excessive workload can also contribute to emotional exhaustion and psychological strain, particularly in high-demand occupations. In aviation, where safety is crucial and precision is essential, an uneven distribution of tasks can negatively impact focus, motivation, and overall well-being. Work-life balance refers to the extent to which employees are able to manage work responsibilities alongside personal and family roles (Karani et al., 2022). It is better understood as a condition that supports well-being rather than as a source of stress. In aviation, long duty periods, irregular schedules, frequent travel, and time away from home may disrupt this balance and create work–life conflict. Such conflict has been linked to psychological distress, reduced well-being, and poorer employee functioning (Wong et al., 2022).

Employee well-being is also influenced by the work environment. The Oxford Dictionary (2023) defines "environment" as the surroundings where a person lives or works. The work environment encompasses the physical, social, and organizational conditions within which employees perform their duties (Pillarisetti et al., 2024). Workplace environments characterized by supportive leadership, effective communication, positive interpersonal relationships, and psychological safety are associated with improved employee well-being and mental health. Conversely, environments marked by poor support, workplace conflict, bullying, harassment, and unclear organizational structures are linked to increased psychological distress and reduced well-being (World Health Organization (WHO), 2024). In the aviation sector, where teamwork, communication, and safety are fundamental to operations, the quality of the work environment plays an important role in shaping employees' emotional well-being and job performance.

Occupational demands refer to the physical, psychological, social, and organizational aspects of work that require sustained effort and adaptation from employees. In the aviation sector, personnel operate in complex environments characterized by high responsibility, continuous vigilance, operational deadlines, regulatory requirements, and safety-sensitive decision-making (Musa et al., 2025). Prolonged exposure to these demands has been associated with fatigue, emotional exhaustion, stress, and reduced psychological well-being among aviation professionals (Rodrigues et al., 2024). Studies within aviation have shown that excessive workload, role conflict, and sustained performance pressure can adversely affect employee well-being, making job demands an important factor in understanding mental health outcomes in safety-critical occupations (Rodrigues et al., 2024; Musa et al., 2025).

In Sub-Saharan Africa, there has been growing documentation of work-related stress and its effects on mental health. Studies conducted in Nigeria (Uhuegho et al., 2025), South Africa (de Witt et al., 2024) and Ghana (Akparibo et al., 2025) indicate that employees in high-pressure sectors such as transportation, healthcare, and aviation experience considerable psychological strain associated with workload pressures, staffing shortages, resource constraints, and limited access to mental health support services. These findings indicate the need for greater recognition and management of work-related stress in safety-sensitive industries across the region.

Kenya faces similar challenges, with studies documenting the effects of long working hours, heavy workloads, staffing shortages, and organizational pressures on employees' psychological well-being. Research among Kenyan healthcare workers found high levels of stress, burnout, anxiety, and sleep disturbances associated with demanding

work conditions and limited support systems (Afulani et al., 2021; Kwobah et al., 2020). Within the aviation sector, safety management frameworks developed by the Kenya Civil Aviation Authority emphasize the need for continuous risk management, safety oversight, and human performance considerations in maintaining operational safety (Kenya Civil Aviation Authority (KCAA), 2023). International aviation bodies have also noted that aviation personnel frequently face stress arising from operational demands, safety responsibilities, and concerns about seeking mental health support due to stigma and potential career consequences (International Federation of Air Line Pilots' Associations (IFALPA), 2025; International Civil Aviation Organization (ICAO), 2026). These national and industry-specific factors demonstrate the importance of examining work-related stress within the Kenyan aviation context.

Based on this context, the study aims to examine how stressors such as workload, work–life balance, work environment, and job demand relate to the mental health of aviation professionals. It focuses on identifying patterns of association rather than establishing causation, offering a holistic understanding of how these factors collectively influence well-being in a safety-critical field. This overview forms part of a broader chapter outlining the research topic, background, problem statement, purpose, objectives, and research questions. It also highlights the study's significance, scope, limitations, and delimitations. The study draws on three complementary theoretical perspectives because work-related stress and mental health are influenced by individual, organizational, and workplace-system factors. No single theory adequately captures all dimensions of the phenomenon under investigation.

The Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) explains how employees perceive workplace stressors and how coping responses influence mental health outcomes. The Job Demand–Resources Model (Bakker & Demerouti, 2007) provides an organizational perspective by explaining how workplace demands such as workload and job pressure, as well as resources such as supportive work environments and work–life balance, influence employee well-being. The Workplace Mental Health and Well-Being Framework (Kelloway et al., 2023) extends this understanding by focusing on organizational policies, leadership practices, and support systems that promote psychological health. Collectively, these theories provide individual, organizational, and institutional perspectives for understanding the relationship between work-related stress and mental health among aviation professionals.

1.2 Background of the Study

Stress at work has become a big problem for workers' health around the world, hurting their emotional, mental, and social well-being. The World Health Organization (WHO, 2022) states that good mental health helps people deal with everyday stress, do their jobs well, and make a difference in society. Stress occurs when the demands of the workplace surpass an individual's ability to cope, potentially resulting in adverse psychological effects, including exhaustion, emotional distress, and diminished job performance (International Labour Organization (ILO), 2021). As companies get more complicated and focused on performance, mental health has a bigger impact on both the health of employees and the productivity of the company.

The aviation sector is a high-pressure place to work. Aviation workers work in situations where safety is very important, and they need to be very focused, make decisions

quickly, and follow all the rules (International Civil Aviation Organization (ICAO), 2020). Employees frequently endure irregular shifts, extended working hours, and operational unpredictability, all of which have been associated with increased stress, fatigue, and adverse psychological outcomes among aviation personnel (Li et al., 2021; International Civil Aviation Organization (ICAO), 2020). In the aviation industry, mental health challenges can affect not only the performance and decision-making capacity of individual employees but also passenger safety and organizational reliability, given the safety-critical nature of aviation operations (World Health Organization (WHO), 2022; ICAO, 2020). Consequently, the effective management of work-related stress remains a critical priority for both employee well-being and operational safety.

Globally, occupational mental health has gained attention because work-related stress is no longer viewed only as an individual problem but also as an organizational and productivity concern. Recent workplace mental health literature shows that excessive job demands, poor recovery, weak organizational support, and limited psychological safety are associated with emotional exhaustion, burnout, anxiety, and reduced work functioning (Sarkar et al., 2024; Li et al., 2025). In safety-sensitive sectors such as aviation, these risks are more pronounced because employees are expected to sustain vigilance, regulate fatigue, make timely decisions, and maintain consistent performance under operational pressure. This makes the study of work-related stress important not only for employee well-being but also for service reliability and safety outcomes (Sarkar et al., 2024; Li et al., 2025).

Workplace conditions play a significant role in influencing employees' mental health and psychological well-being (Mohr et al., 2024). One of the most commonly studied workplace stressors is workload, which refers to the quantity, intensity, and pace of tasks

that employees are required to complete within a given period. Recent evidence indicates that excessive workload is associated with psychological strain, fatigue, emotional exhaustion, burnout, and diminished well-being, particularly in occupations characterized by high responsibility and continuous performance demands (Li et al., 2025). Within the aviation industry, where employees are expected to maintain high levels of vigilance, accuracy, and compliance with safety procedures, excessive workload may impair concentration, reduce resilience, and increase vulnerability to mental health challenges (Zhang et al., 2024). Persistent exposure to heavy workload demands, especially when accompanied by limited opportunities for rest and recovery, has been linked to adverse psychological outcomes and reduced occupational well-being (Sarkar et al., 2024).

Work–life balance is another important determinant of employee mental health. Rather than constituting a source of stress itself, work–life balance refers to an individual's ability to effectively manage work responsibilities alongside personal and family obligations. Recent studies indicate that difficulties in achieving this balance are associated with increased stress, anxiety, emotional exhaustion, and reduced psychological well-being (Kelloway et al., 2023). Aviation professionals often encounter challenges in maintaining work–life balance because of irregular schedules, extended duty periods, frequent travel, and operational disruptions. Such conditions may limit opportunities for recovery, family interaction, and social engagement (ICAO, 2025). Research has shown that employees who experience persistent work–life conflict are more likely to report emotional strain, reduced life satisfaction, and poorer mental health outcomes than those who maintain a healthier balance between occupational and personal demands (Jiang et al., 2022).

The work environment also contributes significantly to employee well-being. Within contemporary occupational health research, the work environment encompasses the physical, social, and organizational conditions under which employees perform their duties (Lesener et al., 2020). Recent studies have shown that supportive work environments characterized by effective leadership, positive interpersonal relationships, clear communication, and psychological safety are associated with improved mental health, higher engagement, and lower levels of workplace stress (Kelloway et al., 2023; Zhang et al., 2024; Li et al., 2025). Conversely, environments marked by interpersonal conflict, inadequate support, poor communication, and negative workplace behaviors may contribute to anxiety, emotional exhaustion, and psychological distress. In aviation settings, where teamwork, coordination, and communication are essential for safe operations, the quality of the work environment plays an important role in shaping employees' emotional well-being, coping capacity, and overall mental health outcomes (Zhou et al., 2024).

In addition, role-related demands and workplace expectations represent another important aspect of work-related stress. Contemporary developments in the Job Demands–Resources framework indicate that employees' psychological well-being is influenced not only by workload and task intensity but also by the clarity of expectations, availability of organizational support, and employees' ability to manage competing responsibilities (Li et al., 2025). In aviation environments, personnel operate within systems characterized by strict safety requirements, regulatory obligations, operational deadlines, and high-performance expectations. Unclear responsibilities, conflicting demands, and inadequate communication may increase cognitive strain and workplace stress (Mohr et al., 2024).

Conversely, clear role expectations, effective communication, and supportive organizational structures can help employees manage workplace demands more effectively and maintain better psychological well-being. Research has consistently shown that employees who experience greater role clarity and organizational support report lower levels of emotional distress and better mental health outcomes than those operating under conditions of uncertainty and ambiguity (Kelloway et al., 2023).

The aviation industry has experienced significant growth across Sub-Saharan Africa due to increasing regional connectivity, tourism, trade, and humanitarian operations. Despite this growth, research indicates that employees in many African aviation and transportation sectors continue to face considerable work-related stress arising from staffing shortages, limited organizational resources, demanding work schedules, and inadequate access to mental health support services. Studies conducted in Nigeria (Adeniyi, 2019), South Africa (Makhubela, 2020), and Ethiopia (Abate, Tadesse, & Mekonnen, 2020) have reported elevated levels of occupational stress, burnout, fatigue, and psychological distress among employees working in safety-sensitive and high-demand occupations. Similar findings have also been reported in Ghana, where workplace stress has been associated with reduced employee well-being and productivity. In addition, mental health stigma and limited psychosocial support structures remain common challenges across many African workplaces, discouraging employees from seeking professional help when experiencing psychological difficulties (World Health Organization (WHO), 2022). These findings highlight the growing need to understand and address work-related stress within safety-critical industries across the African continent.

The aviation industry in Africa has experienced steady growth driven by economic expansion, increasing regional connectivity, growth in tourism and trade, urbanization, and implementation of initiatives such as the Single African Air Transport Market (SAATM) (IFALPA, 2025). Despite this growth, many aviation organizations continue to face challenges related to workforce pressures, resource limitations, and access to employee mental health support services. Concerns regarding occupational stress and mental well-being have received increasing attention as aviation personnel operate in environments characterized by high safety demands, irregular schedules, and significant operational responsibilities (ICAO, 2025). These contextual factors imply that aviation professionals may encounter work-related pressures without sufficient access to organizational or psychological support systems. To understand stress in the African aviation industry, you need to look at both operational and socio-cultural aspects

Within the aviation sector, employees are required to manage operational schedules, regulatory compliance requirements, customer service responsibilities, and safety-critical decision-making processes simultaneously (KCAA, 2023). Industry reports have highlighted concerns related to fatigue management, irregular schedules, workload pressures, and the stigma associated with discussing mental health concerns within aviation workplaces (KCAA, 2023). Concerns, including inconsistent schedules, heavy workloads, lack of organizational support, and limited access to counseling services, could have an impact on employees' mental health (International Air Transport Association (IATA), 2024), but there hasn't been much research on this in the Kenyan aviation industry yet.

In Kenya, published evidence on occupational mental health is more developed in healthcare than in aviation. For example, Kwobah et al. (2021) found that Kenyan

healthcare workers experienced mental health concerns during the early phase of the COVID-19 pandemic, pointing to the psychological burden of demanding work, uncertainty, and limited support systems. Although healthcare differs from aviation, both sectors involve safety-sensitive duties, high responsibility, fatigue risk, and pressure to maintain performance even under strain. This supports the need to extend occupational mental health research into Kenyan aviation, where employees face irregular schedules, operational deadlines, regulatory duties, and stigma around mental health disclosure (Kwobah et al., 2021; Sarkar et al., 2024).

International organizations have stressed the importance of mental health in aviation, but there is not much empirical evidence about this in Kenya. Global research offers significant insights; nevertheless, it may not completely represent local organizational practices, cultural attitudes towards mental health, or operational situations within Kenyan aviation (WHO, 2022). There is a significant deficiency of research investigating the correlation between primary stressors, workload, work–life balance, work environment, and job demand, and the mental health of aviation workers in Kenya. ALS Ltd., which operates from Wilson Airport in Nairobi, provides an appropriate setting for this study due to its diverse workforce and involvement in safety-sensitive aviation operations.

Despite global and regional recognition of workplace mental health risks, the Kenyan aviation sector remains under-examined in empirical literature. Existing evidence shows that job demands, workload, role clarity, work-life conflict, and organizational support are linked to employee mental health outcomes in other occupational settings, but these relationships have not been sufficiently tested among aviation professionals in Kenya (Li

et al., 2025; Kwobah et al., 2021). This gap is important because aviation work combines technical precision, safety responsibility, irregular schedules, and performance accountability. ALS Ltd. therefore provides a suitable case for generating context-specific evidence on how workload, work-life balance, work environment, and job demand-related stress relate to mental health among aviation professionals.

This study aims to examine the correlation between specific work-related stressors and the mental health of employees at ALS Ltd. The project seeks to produce context-specific data to influence organizational policy, direct mental health interventions, and enhance national discourse on occupational well-being in safety-sensitive environments.

1.3 Statement of the Problem

Mental health among aviation professionals is a critical occupational and safety concern because aviation operations require sustained attention, sound judgement, emotional stability, and rapid decision-making. Poor mental health may impair concentration, communication, and performance, thereby increasing safety risks. Recent guidance from ICAO (2026) and IFALPA (2025) recognizes that work-related stress, fatigue, and psychological strain pose significant risks to both employee well-being and operational safety. In Kenya, where aviation contributes approximately USD 3.3 billion (3.1% of GDP) and supports about 460,000 jobs (IATA, 2025), personnel operate under demanding workloads, irregular schedules, strict regulatory requirements, and safety-critical responsibilities that may expose them to workload-related stress, work-life balance-related stress, work environment-related stress, and job demand-related stress.

Despite these realities, there is limited empirical evidence on how these work-related stressors influence the mental health of aviation professionals in Kenya. Existing Kenyan

studies have largely examined occupational stress among healthcare workers and police officers (Kwobah et al., 2021; Shah et al., 2021; Ali et al., 2022; Biwott et al., 2023; Ajiduah et al., 2026), whose work contexts differ substantially from aviation. This leaves an important knowledge gap regarding the relationship between work-related stress and mental health among aviation professionals, particularly employees at Aircraft Leasing Services Limited (ALS Ltd.), which this study sought to address.

1.4 Purpose of the Study

The purpose of this study is to examine the effect of workload, work–life balance, work environment, and job demand on the mental health of aviation professionals at ALS Ltd., Nairobi, Kenya.

1.5 Objectives of the Study

1.5.1 General Objective of the Study

The general objective of the study was to examine the effect of work-related stress on mental health among aviation professionals in the aviation industry in Kenya.

1.5.2 Specific Objectives of the Study

The research was guided by the following research objectives:

i. To determine the effect of workload-related stress on mental health among employees at ALS Ltd., Nairobi, Kenya.
ii. To determine the effect of work-life balance-related stress and mental health among employees at ALS Ltd., Nairobi, Kenya.
iii. To investigate the effect of work environment-related stress on employees' mental health at ALS Ltd., Nairobi, Kenya.

iv. To determine the effect of job demand-related stress and mental health outcomes among employees at ALS Ltd., Nairobi, Kenya.

1.6 Research Questions

i. What is the effect of workload-related stress on mental health among employees at ALS Ltd., Nairobi, Kenya?

ii. To what extent does work–life balance-related stress influence mental health among employees at ALS Ltd., Nairobi, Kenya?

iii. How does work environment-related stress influence the mental health of employees at ALS Ltd., Nairobi, Kenya?

iv. What is the effect of job demand-related stress on mental health among employees at ALS Ltd., Nairobi, Kenya?

1.7 Significance of the Study

This study is beneficial to ALS Ltd. by providing evidence on how workload, work–life balance, work environment, and job demand influence employees' mental health. The findings may support the development of workplace interventions aimed at promoting employee well-being and enhancing organizational performance.

The study will benefit mental health practitioners and occupational health professionals by providing context-specific information on work-related stress and mental health among aviation personnel. The findings may inform the design of appropriate prevention, counseling, and employee support programs.

The study will offer policy makers and regulators, including the KCAA and the Ministry of Labour, by providing empirical evidence that may inform occupational health, workplace well-being, and mental health policies within the aviation sector.

The study will contribute to the academic literature on work-related stress and mental health by providing evidence from the Kenyan aviation industry, a context that has received limited scholarly attention. The findings may also serve as a reference for future research on occupational health and employee well-being.

1.8 Scope of the Study

This research examined the effects of work-related stress on the mental health of employees at ALS Ltd., located at Wilson Airport, Nairobi, Kenya. The study's scope was defined by geographical, conceptual, demographic, and temporal boundaries, each supported by a specific rationale.

The study was conducted at Wilson Airport in Nairobi, the headquarters of ALS Ltd. ALS Ltd. is one of Kenya's top aviation enterprises, and it has a wide range of employees, including pilots, engineers, technicians, flight attendants, flight operations officers, and administrative staff. This is why this site was chosen. The Nairobi base is also where the company's management, scheduling, and operational decisions are made. This made it an appropriate site for obtaining comprehensive information about the organization and its employees.

ALS Ltd. offered a pertinent and high-demand workplace defined by stringent safety protocols, intricate operational demands, and time-sensitive duties, rendering it an appropriate subject for the analysis of work-related stress and its relationship with mental health. Conducting the study at this site ensured that employees working under different operational pressures were included, which allowed the research to examine a wide range of stress experiences across different job categories. Furthermore, Nairobi was easily accessible, had a large concentration of aviation personnel, and played a significant role in

Kenya's aviation industry, which made it an appropriate location for a detailed and context-specific study.

The research concentrated on four independent variables: workload, work–life balance, work environment, and job demand, alongside one dependent variable: mental health. These factors were chosen because there is already theoretical and empirical evidence that they are directly linked to work-related stress (Demerouti et al., 2001; Cooper & Quick, 2017). In aviation and occupational health literature, these have been identified as major dimensions of work-related stress.

The target group was ALS Ltd. employees, including pilots, engineers, cabin crew, and office workers. These groups were chosen because they show varied levels of stress exposure in the aviation company, from safety-critical operational duties (like flight crew and engineers) to customer service and administrative tasks. The variety of responsibilities made it possible to examine stressors across different organizational departments. The study encompassed personnel at ALS Ltd. who had a minimum tenure of one year. This ensured that participants had sufficient organizational experience in the company to appropriately characterize how work stress affects their mental health. New hires may not have fully acclimated to the company's needs or learned how to deal with stress over time.

The research concentrated on data gathered over the 2025-2026 academic year, illustrating the prevailing working circumstances and mental health trends at ALS Ltd. One year was considered for a master ’s-level descriptive case study, ensuring that the findings accurately represented the organization's operational and psychosocial context during the study period.

1.9 Delimitation(s) of the Study

This study was delimited by its geographical scope, study population, conceptual focus, and time frame. The research was conducted at ALS Ltd., an aviation company operating from Wilson Airport in Nairobi, Kenya. The study focused exclusively on ALS Ltd. and excluded other aviation organizations such as commercial passenger airlines, state-owned aviation corporations, and regulatory agencies, including the KCAA. This delimitation enabled an in-depth examination of work-related stress and mental health within a specific organizational and operational context.

The study targeted six employee categories within ALS Ltd., namely pilots, aircraft maintenance engineers, technicians, flight attendants, flight operations officers, and administrative staff. External contractors, third-party service providers, airport security personnel, and other individuals not directly employed by ALS Ltd. were excluded from the study. This delimitation ensured that data were collected from employees who were directly exposed to the organization's work environment, policies, and operational demands.

Conceptually, the study focused on four workplace factors: workload, work–life balance, work environment, and role clarity, and their association with employees' mental health. The study deliberately concentrated on work-related psychosocial factors and excluded non-work influences on mental health such as financial difficulties, family problems, genetic predispositions, medical conditions, and other personal circumstances outside the workplace.

The study assessed mental health using self-reported questionnaire responses and qualitative accounts of employees' experiences. Standardized psychological measures and

thematic analysis were used to evaluate mental health outcomes. Clinical psychiatric diagnoses, medical records, and physiological indicators such as cortisol levels, heart-rate variability, or other biomedical assessments were not included.

The study adopted a cross-sectional mixed-methods approach and was conducted during the 2025–2026 study period. Data were collected at a single point in time to capture employees' experiences under prevailing workplace conditions during the study period.

1.10 Limitations of the Study

The study relied on self-reported data collected through questionnaires and interviews. Responses concerning mental health and workplace stress may have been influenced by social desirability bias, recall bias, or reluctance to disclose personal experiences. This concern is particularly relevant in the aviation industry, where employees may fear stigma or potential professional consequences associated with reporting psychological difficulties.

The study adopted a cross-sectional design in which data were collected at a single point in time. As a result, the findings establish associations between work-related stress factors and mental health but do not provide evidence of causal relationships. Consequently, it cannot be concluded with certainty whether workplace stressors influenced mental health outcomes or whether existing mental health conditions affected employees' perceptions of workplace stress.

The research was conducted at ALS Ltd. only. Organizational culture, management practices, operational demands, and employee support systems may differ across aviation organizations. Therefore, the findings should be interpreted within the context of ALS Ltd.

and may not be fully generalizable to other aviation companies, airlines, regulatory agencies, or aviation institutions in Kenya.

The qualitative phase involved a small number of purposively selected participants drawn from employees who reported relatively high levels of work-related stress. Although the interviews provided valuable insight into the quantitative findings, some occupational groups may have been represented more heavily than others. Consequently, the qualitative findings may not fully capture the experiences of all employee categories within the organization.

Aviation personnel often work irregular schedules, shifts, and duty rosters, which may have affected participant availability during data collection. These scheduling constraints may have influenced response rates and limited opportunities for extended engagement with some participants.

1.11 Assumptions of the Study

The study assumed that participants would provide honest and accurate responses regarding their experiences of work-related stress and mental health. It was also assumed that employees at ALS Ltd. experience varying levels of workload, work–life balance, work environment, and job demand-related stress. The study further assumed that these factors are associated with employees' mental health and can be measured using the selected research instruments. Participation was assumed to be voluntary and truthful, while workplace conditions at ALS Ltd. were expected to remain relatively stable during the period of data collection.

1.12 Theoretical Framework

This study was grounded in four theories, each aligned with one specific objective. The use of four theories allows each dimension of work-related stress to be examined through a theory that directly speaks to the variable under investigation. The first objective was grounded in Allostatic Load Theory, the second in Work–Family Conflict Theory, the third in Psychosocial Safety Climate Theory, and the fourth in Role Stress Theory.

1.12.1 Allostatic Load Theory

Allostatic Load Theory was advanced by McEwen and Stellar (1993) to explain how repeated or prolonged exposure to stress produces cumulative wear and tear on the body and mind. The theory holds that human beings adapt to stress through physiological and psychological regulatory systems, but when these systems are repeatedly activated without adequate recovery, strain accumulates and may lead to poor health outcomes. The theory is useful in occupational stress research because it explains how continuous demands, long working hours, and insufficient recovery can gradually impair well-being rather than causing harm only through one isolated stressful event. McEwen and Stellar (1993) coined the concept of allostatic load to refer to the cumulative cost of repeated or chronic stress exposure.

The theory has been widely applied in health psychology, occupational stress, and mental health studies to explain how chronic stress exposure contributes to fatigue, burnout, anxiety, depressive symptoms, and reduced functioning (Juster et al., 2010; Guidi et al.,2021). It has also been used to show that stress is not only a psychological experience but also a cumulative process that affects emotional regulation, concentration, sleep, and physiological stability. Later work by McEwen (1998) strengthened the theory by showing

that stress mediators may have both protective and damaging effects depending on duration and intensity of exposure. In work settings, this theory has been used to explain why sustained workload, time pressure, and limited recovery are associated with poorer mental and physical health.

In the current study, Allostatic Load Theory grounds Objective One, which sought to determine the effect of workload-related stress on mental health among employees at ALS Ltd., Nairobi, Kenya. Aviation work often involves long duty hours, strict timelines, safety-sensitive tasks, and continuous alertness. When such workload pressures persist without adequate breaks or recovery time, employees may experience accumulated psychological strain. The theory therefore explains how workload-related stress may gradually affect employees' mental health through fatigue, emotional exhaustion, reduced coping capacity, and increased psychological distress.

1.12.2 Work–Family Conflict Theory

Work–Family Conflict Theory was developed by Greenhaus and Beutell (1985). The theory explains that conflict occurs when demands from work and family roles are mutually incompatible, making participation in one role difficult because of participation in the other. Greenhaus and Beutell (1985) identified three main forms of conflict: time-based conflict, strain-based conflict, and behavior-based conflict. Time-based conflict occurs when time spent in one role limits participation in another; strain-based conflict occurs when stress from one role affects performance in another; and behavior-based conflict occurs when behaviors required in one role are incompatible with expectations in another role.

This theory has been widely used in occupational health, human resource management, and organizational psychology to examine how work schedules, long hours, travel, shift work, and organizational expectations interfere with employees' family, social, and personal lives (Allen et al., 2020). Studies on work–family conflict show that work-to-family conflict is associated with stress, burnout, lower job satisfaction, poor well-being, and reduced work performance (Wayne et al., 2022). The theory is especially relevant in sectors where employees work irregular schedules, travel frequently, or have limited control over working time.

In this study, Work–Family Conflict Theory grounds Objective Two, which sought to determine the effect of work-life balance-related stress on mental health among employees at ALS Ltd., Nairobi, Kenya. Aviation professionals may face irregular duty schedules, extended working hours, limited rest time, and unpredictable operational demands. These conditions can interfere with family responsibilities, recovery, social activities, and personal time. The theory therefore explains how difficulties in balancing work and personal life may contribute to psychological strain, emotional tension, fatigue, and reduced mental well-being among ALS Ltd. employees.

1.12.3 Psychosocial Safety Climate Theory

Psychosocial Safety Climate Theory was developed by Dollard and Bakker (2010). The theory explains that employees' mental health is influenced by the extent to which an organization values, protects, and supports psychological health and safety. Psychosocial safety climate refers to shared perceptions of organizational policies, practices, and procedures for protecting workers' psychological health. The theory emphasizes

management commitment, management priority, organizational communication, and employee participation in matters affecting psychological safety.

This theory has been applied in workplace mental health research to examine how leadership, communication, safety climate, supervisor support, workload policies, and organizational culture affect psychological distress, burnout, engagement, absenteeism, and productivity (Idris et al., 2021). Research on psychosocial safety climate shows that healthier organizational climates are associated with better psychological outcomes, while poor psychosocial climates are linked to workplace stress, job dissatisfaction, emotional exhaustion, and depressive symptoms (Hall et al., 2023). The theory has been used across industries because it focuses on the work environment as a source of either protection or risk.

In this study, Psychosocial Safety Climate Theory grounds Objective Three, which sought to investigate the effect of work environment-related stress on employees' mental health at ALS Ltd., Nairobi, Kenya. The work environment in aviation includes supervisory support, collegial relations, communication, feedback, psychological safety, and handling of workplace concerns. Where employees perceive the environment as supportive, respectful, and communicative, mental health may be protected. Where the environment is marked by poor communication, weak support, conflict, or fear of disclosure, employees may experience higher psychological strain. The theory therefore explains how the organizational and social work environment at ALS Ltd. may influence employees' mental health.

1.12.4 Role Stress Theory

Role Stress Theory is rooted in the work of Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964), who examined organizational stress through role conflict and role ambiguity. The theory argues that employees experience stress when job expectations are unclear, conflicting, excessive, or inconsistent with available authority and resources. Role conflict occurs when employees face incompatible expectations, while role ambiguity occurs when employees lack clear information about duties, authority, procedures, or performance expectations.

Role Stress Theory has been widely used in organizational behavior and occupational stress research to examine how unclear job descriptions, competing instructions, inadequate communication, low autonomy, and conflicting task demands affect employee well-being (Eatough et al., 2011). Empirical studies have linked role ambiguity and role conflict to job dissatisfaction, anxiety, burnout, reduced performance, and psychological strain (Tubre & Collins, 2000). The theory is useful in technical and safety-sensitive workplaces because uncertainty in roles can increase cognitive burden, decision pressure, and emotional tension.

In the current study, Role Stress Theory grounds Objective Four, which sought to determine the effect of job demand-related stress on mental health outcomes among employees at ALS Ltd., Nairobi, Kenya. Aviation employees operate in environments where task expectations, communication, role clarity, autonomy, and involvement in decisions are important for safe performance. When employees receive unclear instructions, conflicting duties, limited autonomy, or insufficient involvement in work-related decisions, they may experience role-related strain. The theory therefore explains

how job demand-related stress, particularly through role clarity, task conflict, autonomy, and involvement, may influence mental health outcomes among ALS Ltd. employees.

1.13 Conceptual Framework

The conceptual framework shows how the main variables looked at in this study are related to each other. In this study, work-related stress constituted the independent variable and was operationalized through four dimensions: workload, work-life balance, work environment, and job demand. Mental health constituted the dependent variable and referred to the psychological well-being of employees as measured using mental health indicators.

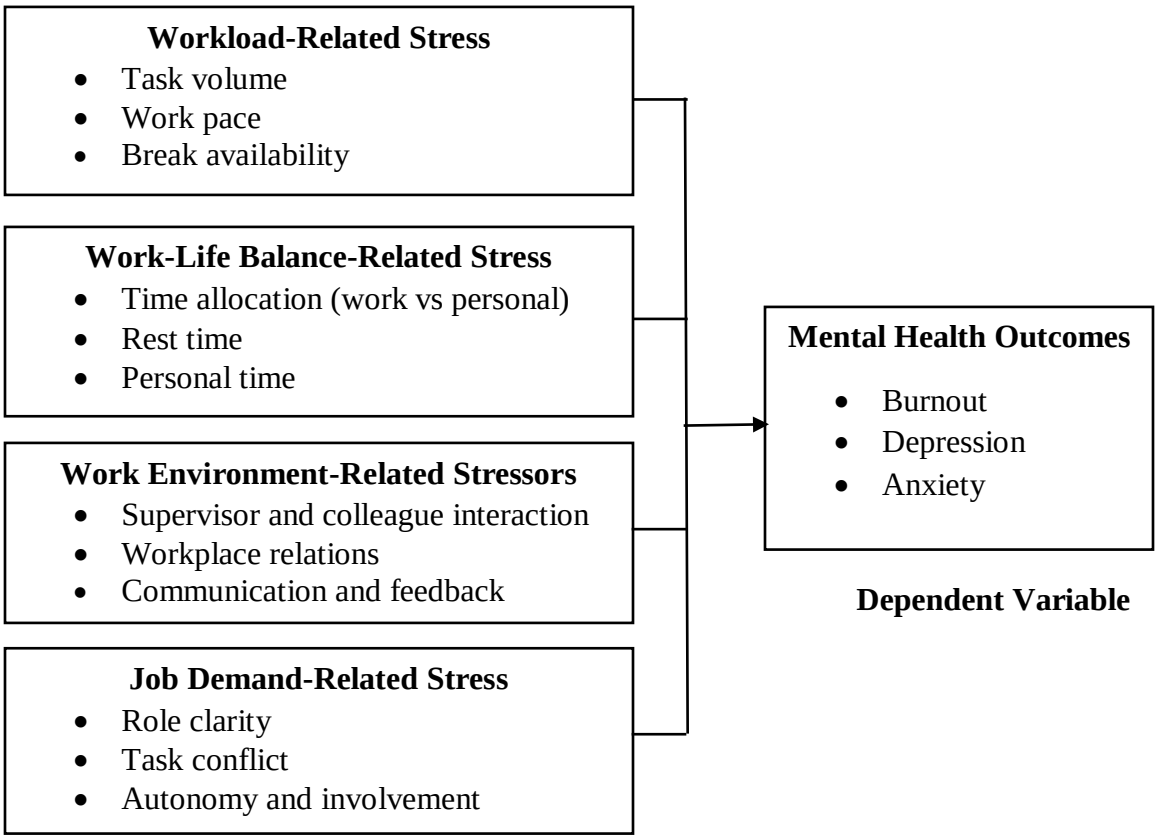


Figure 1.1: Conceptual Framework
Source: Researcher (2026)

The conceptual framework demonstrates the interdependence between work-related stress (independent variable), intervening variables, and mental health outcomes (dependent variable) among aviation professionals at ALS Ltd. The relationship is best understood through a transactional and systems-based perspective, where stressors, individual appraisal, available resources, and outcomes interact continuously.

Work-related stress (IV) is identified as the major predictor of employee psychological well-being, with higher levels of stress potentially leading to poorer mental health outcomes. The Transactional Model of Stress and Coping by Lazarus and Folkman (1984) posits that stress occurs when individuals view job expectations as surpassing their available coping resources. In the aviation industry, where employees have to deal with irregular shifts, high-stakes decisions, safety pressures, and a lot of multitasking, they often see these demands as threatening or overwhelming, which can lead to emotional strain, changes in thinking, and physiological arousal (Lazarus & Folkman, 1984; Taylor & Thomas, 2020). Extended exposure to these stressors without sufficient coping strategies may lead to burnout, irritation, anxiety, depressive symptoms, and reduced psychological functioning (WHO, 2023).

But this relationship isn't always straight or the same. Work-related stress is significantly influenced by intervening variables, including coping methods, resilience, organizational support, social support systems, workplace culture, and communication patterns. The Job Demand–Resources (JD-R) Model suggests that these intervening variables operate as either job resources that mitigate stress or as risk factors that exacerbate strain (Demerouti et al., 2001; Bakker & Demerouti, 2017). For instance, sufficient organizational support, social cohesion, supportive supervision, and access to wellness or

counseling services function as protective buffers by augmenting employees' available resources and mitigating the effects of workplace demands (Bakker & Demerouti, 2017). Conversely, insufficient support, ineffective communication, detrimental workplace culture, and absence of mental health frameworks exacerbate the relationship of stressors, leading to emotional exhaustion, diminished performance, and impaired decision-making, elements that are particularly vital in aviation operations (Parker et al., 2020).

The dependent variable, mental health outcomes, indicates the effects resulting from the interaction between stressors and intervening variables. The Workplace Mental Health and Well-Being Framework posits that an employee's mental health outcomes are affected by stress levels, organizational practices, support systems, and access to psychological services (WHO, 2020; ILO, 2022). Positive intervening variables can facilitate adaptive coping, bolster emotional resilience, foster psychological equilibrium, and augment job satisfaction. On the other hand, mismanaged high stress and insufficient intervening supports can cause emotional dysregulation, burnout, anxiety, depressive symptoms, absenteeism, and less effective work (WHO, 2023; American Psychological Association, 2022).

The conceptual framework essentially highlights that work-related stress directly affects employees, with intervening circumstances dictating the strength and direction of this relationship. When resources are plentiful, the negative effects are lessened; when they are scarce, stress is made worse. The ensuing mental health results reflect the aggregate influence of stress evaluation, accessible resources, and contextual workplace factors.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews existing research on work-related stress and its relationship with the mental health of employees within the aviation industry. Its purpose is to synthesize current theoretical and empirical research that explains how work-related stress develops in high-pressure environments and how it affects mental health outcomes among aviation workers. According to the World Health Organization (2022), work-related stress occurs when an employee's job expectations and pressures exceed their ability to cope effectively. This can lead to negative mental health outcomes such as burnout, anxiety, and depression. In this study, work-related stress is conceptualized as the independent variable, while mental health is conceptualized as the dependent variable reflecting employees' psychological well-being. Kelloway, Dimoff, and Gilbert (2023) note that aviation, as a safety-sensitive and performance-oriented industry, presents unique psychological pressures that require responses from both individuals and organizations.

The review begins by defining work-related stress and identifying common stressors in aviation, such as work overload, long and irregular shifts, insufficient breaks, and the responsibility for safety-critical tasks (Masi, 2023). It also analyzes the psychological and physiological effects of prolonged exposure to stressors, including cognitive fatigue, emotional exhaustion, and reduced job satisfaction (Safitri et al., 2025). The discussion draws upon well-known theories, such as the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984), the Job Demand–Resources (JD-R 3.0) Model (Demerouti et al., 2001; Li, 2025), and the Workplace Mental Health and Well-Being

Framework (Kelloway et al., 2023), which explain how workers respond to stressors, employ coping strategies, and utilize available resources to maintain well-being.

The chapter further examines how job demands, resource accessibility, leadership, and organizational culture influence employees' stress levels and coping mechanisms. Research indicates that inadequate job resources or insufficient managerial support can intensify stress and impair performance and well-being (Ballard et al., 2025). Additionally, the chapter addresses systemic challenges that hinder access to mental health care in aviation, such as stigma, privacy concerns, and the lack of proactive mental health initiatives (Chavez & Miller, 2018; Parker et al., 2020).

Finally, the review explores both proactive (preventive wellness initiatives) and reactive (post-crisis counseling) mental health interventions, highlighting inadequacies in support systems that fail to mitigate stress before it progresses into clinical problems. The literature is reviewed from a global perspective before narrowing to African, regional, Kenyan, and aviation-specific contexts in order to identify existing knowledge gaps and establish the need for the present study. This review provides the foundation for the present study by emphasizing the importance of investigating work-related stress and mental health among employees at ALS Ltd. Findings from contemporary research are expected to inform the study's design, influence its methodology, and support the development of evidence-based strategies to alleviate stress and enhance mental health outcomes for aviation employees in Kenya.

2.2 Review of Literature

Existing literature indicates that job-related stressors, such as excessive workload, inadequate work–life balance, insufficient organizational support, and challenging work

environments, can significantly impact employee mental health across various occupational settings. Research conducted across diverse regions consistently demonstrates that these pressures are linked to psychological consequences, including anxiety, burnout, emotional exhaustion, and diminished job satisfaction.

This section reviews empirical evidence from global, regional, and local contexts. It focuses on the four main variables of this study: workload, work–life balance, work environment, and job demand, and examines how each of these elements affects employees' mental health. In this study, workload, work–life balance, work environment, and job demand represent dimensions of work-related stress (independent variable), while mental health represents the dependent variable reflecting employees' psychological well-being. The review integrates existing scholarship to determine what is currently known and what gaps remain, thereby underscoring the need for the present study.

2.2.1 Relationship Between Workload-Related Stress on Mental Health

Workload refers to the total amount of physical, mental, and emotional effort required to complete work duties within designated timeframes. In aviation, long hours, unpredictable shifts, constant vigilance, and increased safety obligations intensify stress among employees (Masi, 2023). Globally, excessive workload has been identified as a major cause of job stress and mental health problems, including burnout, chronic fatigue, anxiety, and depression.

Masi (2023) conducted a study involving civil and military pilots in the United States and Europe and found that extended working hours led to cognitive deterioration, emotional fatigue, and diminished situational awareness. Similarly, Zhou et al. (2024) examined air traffic controllers in China and reported that constant time pressure

contributed to anxiety, sleep disturbances, and absenteeism. Kelloway, Dimoff, and Gilbert (2023) synthesized over 200 studies from multiple sectors and found significant associations between high workload and burnout, depressive symptoms, and psychosomatic complaints.

In Europe, Taylor and Thomas (2020) observed that insufficient rest and extended duty hours among flight crews in the UK and Germany resulted in chronic exhaustion, emotional detachment, and reduced job satisfaction. Parker et al. (2020) noted that airline pilots in North America often avoid disclosing psychiatric symptoms due to stigma and potential certification consequences, leading to untreated stress and reduced performance.

In Asia, Safitri et al. (2025) found that high physical and mental workload among Indonesian aviation personnel negatively impacted mood and productivity. Tan et al. (2022) reported that rotating shifts among Singaporean maintenance engineers led to sleep difficulties, elevated stress, and emotional exhaustion.

Although aviation-specific literature in Africa is scarce, research from other safety-sensitive occupations offers relevant insights. Habtu et al. (2025) found that excessive workload among Ethiopian healthcare workers resulted in depressive symptoms, anxiety, and emotional exhaustion, while Nkosi and Pillay (2023) reported similar outcomes among transportation personnel in South Africa. In Kenya, Mutua and Njoroge (2022) reported that extended shifts and heavy workload in the transportation sector reduced psychological well-being, and Mwangi (2023) identified chronic fatigue and mental depletion among airport ground-handling staff.

Collectively, the literature indicates that excessive workload is a major determinant of adverse mental health outcomes in safety-sensitive fields. When workload exceeds

human capacity, mental health deteriorates, operational safety diminishes, and productivity declines. Limited aviation-specific research in Sub-Saharan Africa underscores the need for context-specific evidence. Accordingly, this study investigates the relationship between workload and mental health among aviation personnel at ALS Ltd. in Kenya.

2.2.2 Relationship Between Work-Life Balance-Related Stress on Mental Health

Work–life balance refers to the ability to manage work duties and personal commitments simultaneously without either domain negatively affecting the other (Sharma & Cooper, 2023). In aviation, where personnel work long hours, travel frequently, and follow unpredictable schedules, maintaining a healthy work–life balance is especially challenging (Taylor & Thomas, 2020; Lee et al., 2024; Safitri et al., 2025). Work–life imbalance has been associated with emotional exhaustion, strained family relationships, reduced job satisfaction, and heightened psychological distress (Sharma & Cooper, 2023; Kelloway et al., 2023; Eurofound, 2022). Empirical evidence from global, regional, and local studies consistently substantiates these associations.

Sharma and Cooper (2023) conducted a global study involving employees in high-demand roles and found that difficulties in balancing personal and professional responsibilities were associated with increased stress, anxiety, and depressive symptoms. Similarly, Kelloway, Dimoff, and Gilbert (2023) conducted a meta-analysis across high-stress fields, including aviation, and reported that inadequate rest and limited social engagement contributed to emotional exhaustion and reduced resilience.

In Europe, Eurofound (2022) found that irregular scheduling and excessive overtime significantly increased emotional exhaustion and psychological distress among shift workers. Taylor and Thomas (2020) examined long-haul flight crews and noted that

prolonged absences and insufficient rest led to chronic fatigue, strained relationships, and reduced psychological well-being.

Comparable trends have been noted in Asia and North America. Lee et al. (2024) reported that rotating shifts disrupted circadian rhythms and increased emotional exhaustion among Japanese and South Korean flight crew. Safitri et al. (2025) found that irregular schedules among Indonesian aviation personnel contributed to family conflict, poorer health outcomes, and emotional stress. Parker et al. (2020) observed that North American pilots who protected personal time and engaged in peer-support networks were less likely to experience burnout. Biron and van Veldhoven (2022) and Ballard et al. (2025) further documented improvements in mental health and engagement when organizations implemented flexible schedules, supportive leadership, and mental health programs.

Regionally, African studies indicate similar challenges, although aviation-specific evidence remains sparse. Adebayo et al. (2022) found that Nigerian aviation personnel with irregular flight schedules experienced high stress, anxiety, and family strain. Nkosi and Pillay (2023) reported that inflexible scheduling among South African transport workers resulted in elevated stress and adverse health outcomes, highlighting the role of structural constraints in work–life imbalance.

In Kenya, work–life conflict has been documented in sectors with variable shifts and extended work hours. Omondi and Wachira (2023) found that insufficient family time was associated with low mood, irritability, and reduced motivation among employees in multiple industries. Mutua and Njoroge (2022) reported that transportation workers experienced burnout and emotional exhaustion due to limited personal time. Although aviation-focused research is limited, these findings suggest that aviation personnel at ALS

Ltd. are likely to encounter similar challenges due to irregular schedules, extended duty periods, and constrained recovery windows.

Overall, literature across global, regional, and local contexts demonstrates that work–life imbalance is strongly associated with mental distress, burnout, sleep disturbances, and reduced job satisfaction (Sharma & Cooper, 2023; Kelloway et al., 2023; Lee et al., 2024; Safitri et al., 2025). While preventive interventions such as flexible shifts, family-support programs, confidential counseling, peer-support networks, and structured recovery periods have been shown to mitigate these effects (Biron & van Veldhoven, 2022; Ballard et al., 2025; Parker et al., 2020), empirical research on aviation personnel in Kenya remains limited. This gap underscores the need for the present study to generate localized evidence from ALS Ltd. to inform targeted well-being initiatives aligned with international best practices.

2.2.3 Relationship Between Work Environment-Related Stress on Mental Health

The work environment comprises the physical surroundings, interpersonal climate, and psychosocial conditions under which employees perform their duties. It includes workplace safety, communication patterns, interpersonal relationships, management support, and organizational culture. Positive and psychologically secure environments foster motivation, emotional stability, and productivity, whereas detrimental environments contribute to stress, anxiety, depression, and burnout (Kelloway et al., 2023). Numerous empirical studies across global, regional, and local contexts demonstrate significant associations between work environment conditions and employee mental health.

Kelloway, Dimoff, and Gilbert (2023) conducted a multisite investigation across Canada, the United States, and Europe and found that psychologically safe work

environments; characterized by empathic leadership, clear communication, and supportive management; significantly reduced workplace stress and enhanced mental health among employees in safety-critical occupations. Similarly, Schaufeli and Bakker (2022) observed in European occupational settings that supportive organizational climates were associated with lower stress levels, higher employee engagement, and fewer stress-related disorders.

Within aviation, environmental dynamics are particularly evident. Taylor and Thomas (2020) found that unsupportive cockpit and cabin environments, including rigid leadership and ambiguous communication, were associated with anxiety, mental fatigue, and impaired decision-making among long-haul flight crews in Europe. Conversely, collaborative and autonomous team environments improved resilience and psychological well-being.

Zhou et al. (2024) reported that air traffic controllers in China working in psychologically unsafe settings exhibited irritability, sleep disturbances, and anxiety, especially when managerial support was lacking. Ballard et al. (2025) further demonstrated across multiple industries that organizations implementing leadership development, task redesign, and participatory well-being initiatives reported higher morale and reduced burnout, reinforcing the importance of systemic organizational interventions.

In Asia and Europe, Tan et al. (2022) found that inadequate autonomy and excessive supervision among aviation maintenance personnel contributed to insomnia, anxiety, and reduced job performance, whereas supportive leadership improved coping and job satisfaction. In Canada, leadership-focused mental health training programs examined by Kelloway et al. (2023) reduced stigma and improved communication and morale. Biron and van Veldhoven (2022) found that enhanced ergonomics and supervisory support across

European industries were associated with lower emotional strain and improved mental health.

In the United States, Parker et al. (2020) observed that unsupportive management cultures in aviation encouraged concealment of emotional difficulties, contributing to burnout, help-avoidance, and degraded performance, supporting the Workplace Mental Health and Well-Being Framework's emphasis on psychological safety.

Regionally, African evidence demonstrates similar patterns. Habtu et al. (2025) reported that insufficient supervisory support and interpersonal conflict among Ethiopian healthcare workers contributed to occupational depression. Adebayo et al. (2022) found that poor managerial communication and rigid supervision among Nigerian aviation personnel led to emotional exhaustion and low morale, whereas supportive leadership promoted job commitment. Nkosi and Pillay (2023) noted that toxic workplace environments in South African logistics operations precipitated burnout and emotional exhaustion.

In Kenya, aviation-specific research remains limited; however, related studies suggest similar risks. Mwangi (2023) found that stringent supervision, ambiguous roles, and inadequate autonomy among airline ground-handling staff contributed to irritability, anxiety, and emotional fatigue. Mutua and Njoroge (2022) reported that transport workers experienced burnout and deteriorating mental health due to strained supervisory relationships, poor communication, and inflexible demands.

2.2.4 Relationship Between Job Demand-Related Stress on Mental Health

Job demands encompass the physical, mental, social, and organizational aspects of work that require sustained effort and skill. When demands exceed employees' coping

capacity or available resources, they exert negative physiological and psychological effects (Demerouti et al., 2001; Li, 2025). In aviation, job demands typically include rigorous turnaround times, continuous performance monitoring, irregular working hours, and safety-critical responsibilities, which can contribute to emotional exhaustion, anxiety, and stress-related dysfunction.

In North America, Parker, Rodriguez, and Perez (2020) found that continuous monitoring and extended duty cycles among commercial pilots and flight crew were associated with chronic fatigue, heightened anxiety, and reduced attentional control, increasing the likelihood of human error. In Europe, Taylor and Thomas (2020) reported that cumulative duty hours, emotional regulation requirements, and sleep loss among cabin crew predicted burnout and depressive symptoms, demonstrating the erosive effect of sustained job intensity.

In China, Zhou et al. (2024) found that high mental effort and sustained attentiveness among air traffic controllers predicted sleep disruption and reduced job satisfaction, although peer-support systems and greater autonomy in scheduling mitigated these effects. From a policy perspective, Ballard et al. (2025) documented that clear task communication, collaborative workload distribution, and leadership training across aviation and related industries reduced perceived overload and emotional exhaustion, illustrating that demand management operates partly at the organizational level.

Comparable patterns have been documented in Asia and Europe. Lee et al. (2024) found that time pressure among Japanese aviation technicians correlated with psychosomatic symptoms and emotional exhaustion, whereas autonomy and formal recognition mitigated stress. Tan et al. (2022) found that prolonged hours and high task

density among Singaporean engineers and ramp personnel contributed to irritability, exhaustion, and reduced procedural accuracy, especially when employees lacked control over schedules.

Beyond aviation, Kelloway et al. (2023) noted that digital hyper-connectivity and multitasking among North American employees increased anxiety, while psychological safety initiatives and empathic leadership training reduced distress. Biron and van Veldhoven (2022) reported similar results in Europe, where supportive supervision and structured task pacing enhanced resilience and reduced emotional distress.

Regionally, African studies demonstrate analogous outcomes. Habtu et al. (2025), in a study of healthcare workers in Ethiopia, found that administrative burdens and personnel shortages predicted emotional exhaustion and job dissatisfaction. Similarly, Nkosi and Pillay (2023), in a study of logistics personnel in South Africa, reported that tight deadlines and performance evaluations increased burnout and reduced motivation, although participative management buffered these effects.

In Kenya, aviation-related studies remain limited; however, evidence from airport operations research demonstrates that aviation personnel frequently operate in highly demanding environments characterized by strict procedural compliance, operational pressure, and continuous safety monitoring. Such conditions may increase vulnerability to work-related stress and psychological strain if not adequately supported by organizational resources.

Overall, the literature indicates that job demands such as time pressure, long duty periods, continuous monitoring, and emotional labor are consistently associated with adverse mental health and diminished safety performance in aviation and other safety-

critical domains. While certain demands are inherent to aviation, evidence demonstrates that role clarity, collaborative task distribution, autonomy in scheduling, protected recovery opportunities, supervisory support, and leadership training can mitigate negative outcomes. Given the limited aviation-specific research in Kenya, the present study at ALS Ltd. is warranted to generate contextual evidence and inform interventions that balance operational efficiency with employee well-being.

2.3 Summary of Review of Literature and Research Gap

The reviewed literature demonstrates a growing global recognition that work-related stress is significantly associated with the mental health and overall performance of employees in high-pressure industries, particularly aviation. Numerous studies have consistently identified workload, work–life balance, work environment, and job demand as critical determinants of psychological well-being.

Research shows that aviation professionals worldwide are more likely to experience burnout, fatigue, and anxiety due to excessive workload, irregular schedules, and safety-critical responsibilities (Taylor & Thomas, 2020; Zhou et al., 2024). The Job Demand–Resources (JD-R 3.0) Model (Li, 2025) confirms that disproportionate job demands relative to available resources deteriorate mental health. The Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) explains that stress emerges when perceived demands exceed coping resources, while the Workplace Mental Health and Well-Being Framework (Kelloway et al., 2023) emphasizes organizational responsibility through supportive leadership, flexible scheduling, and mental health initiatives.

Empirical data across Asia, Europe, and North America consistently link poor work–life balance, unsupportive work environments, and elevated job demands to

psychological distress and reduced job satisfaction (Lee et al., 2024; Biron & van Veldhoven, 2022). Studies further indicate that organizations with mental health policies and flexible work arrangements report lower stress levels and higher engagement (Ballard et al., 2025; Kelloway et al., 2023).

Although evidence from African countries suggests that work-related stress is associated with adverse mental health outcomes, the existing body of research remains limited in scope and is concentrated largely within healthcare, transport, logistics, and general service sectors. Furthermore, the few available Kenyan studies have focused primarily on occupational stress in non-aviation settings, providing limited insight into the unique operational demands and psychological experiences of aviation personnel. However, there is limited research focusing specifically on aviation and the effects of work-related stress on mental health within aircraft servicing organizations.

The literature consistently acknowledges that work-related stress is a multidimensional phenomenon shaped by individual coping strategies and organizational dynamics. Within the context of this study, work-related stress represents the independent variable measured through workload, work–life balance, work environment, and job demand, while mental health represents the dependent variable reflecting employees' psychological well-being. The three theoretical frameworks analyzed offer a comprehensive basis for understanding how stress appraisal, the balance of job demands and resources, and organizational culture influence mental health outcomes.

Despite extensive global research, several notable gaps remain. First, there is limited aviation-specific research in African contexts. Empirical work on aviation stress is sparse in Africa, with most studies originating from Western and Asian contexts. Second,

there is insufficient evidence on Kenyan aviation professionals. Kenya's aviation sector remains under-researched, especially regarding occupational stress in operational and technical roles. Third, there is limited integration of theoretical frameworks. Few studies combine the JD-R Model, Transactional Model, and Workplace Mental Health and Well-Being Framework to capture both individual and organizational factors. Fourth, there is a paucity of empirical evidence from Aircraft Leasing Services Limited (ALS Ltd.). There is limited research examining work-related stress within Aircraft Leasing Services Limited (ALS Ltd.), a key aviation organization in Kenya. Finally, there is limited focus on preventive mental health strategies. Existing aviation interventions are predominantly reactive, with little emphasis on proactive organizational strategies, especially in African contexts.

Recent evidence demonstrates consistent associations between work-related stress and adverse mental health outcomes across diverse industries and national settings. However, research on these relationships within Kenya's aviation sector, particularly at ALS Ltd., remains insufficient. This study seeks to address these gaps by examining how workload, work–life balance, work environment, and job demands relate to the mental health of aviation personnel in Kenya.

This study contributes to both theoretical and practical knowledge in occupational psychology by integrating the Transactional Model of Stress and Coping, the JD-R 3.0 Model, and the Workplace Mental Health and Well-Being Framework. The findings inform organizational policies, mental health initiatives, and aviation management strategies that enhance employee well-being and resilience.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methodology that was used to examine the effect of work-related stress on the mental health of aviation professionals at ALS Limited in Nairobi, Kenya. This chapter outlines the research design, location, target population, sampling techniques, data collection methods, and data analysis strategies employed in the study. It also discusses the reliability and validity of the research instruments and outlines the ethical and legal considerations that guided the research process.

This study used a methodological approach that was intended to ensure the results are reliable, unbiased, and can be repeated. The study used both quantitative and qualitative methods, which enabled the researcher to obtain both numerical and contextual data regarding the study variables. The quantitative component focused on the measurable relationships between work-related stressors (workload, work–life balance, work environment, and job demand) and mental health outcomes among aviation professionals, while the qualitative component explored participants' experiences and perceptions regarding workplace stress and psychological well-being.

The study's goals were to find out how different types of work-related stress affect the mental health of aviation professionals. These goals guided the approach that was used. The study employed a systematic approach based on empirical evidence to generate findings that may assist in informing organizational policies, strengthening employee support systems, and promoting mental health within the aviation industry. In this study, work-related stress constituted the independent variable and was measured through

workload, work–life balance, work environment, and job demand, while mental health constituted the dependent variable**.**

3.2 Research Design

The design of this study was a descriptive case study. A case study is a method of research that looks at a limited system, such as a person, group, or program, in its real-world setting. This allows the researcher to examine complicated events as a whole (Yin, 2018; Stake, 1995). Case studies do not control variables like experimental designs do; instead, they try to understand events, interactions, and processes as they happen naturally. A descriptive case study explicitly seeks to furnish a comprehensive depiction of the attributes, experiences, and circumstances associated with a phenomenon, rendering it appropriate for investigations aimed at chronicling present realities rather than determining causal linkages.

This research employed a descriptive case study design, which was suitable for an extensive analysis of work-related stress and its relationship with mental health within the actual organizational context of ALS Ltd. This approach allowed for a full examination of the traits, patterns, and connections between important variables, including workload, work-life balance, work environment, and job expectations, without changing the way that aviation professionals naturally work. The study centered on ALS Ltd. as the example organization, thereby documenting the lived experiences of employees inside a safety-critical and rigorously controlled operational environment.

The descriptive nature of this design enabled the researcher to investigate the experiences and viewpoints of aviation professionals across several job categories, including pilots, engineers, flight operations staff, and administrative personnel. Broad,

generalized surveys alone cannot provide such depth of understanding; the case study approach allows the researcher to get nuanced insights into the manifestation of specific stressors inside ALS Ltd. and their association with employee mental health outcomes.

This study employed a mixed-methods approach, integrating both quantitative and qualitative techniques, to augment the depth and dependability of its findings. The study specifically adopted a sequential explanatory mixed-methods design, wherein quantitative data collection and analysis occured first, followed by qualitative exploration (Creswell & Plano Clark, 2018). This design is appropriate because the initial quantitative phase identified levels, trends, and relationships among work-related stressors and mental health outcomes, while the subsequent qualitative phase helped explain and contextualize these statistical patterns. By allowing the interview phase to expand upon and clarify survey results, the sequential explanatory design ensures that the study's interpretations were grounded in both numerical evidence and lived experiences, an essential approach when working with safety-critical populations such as aviation personnel.

Quantitative data collected using standardized questionnaires yielded quantifiable metrics of stress levels, employment demands, and mental health consequences. Qualitative data collected via semi-structured interviews enhanced these findings by providing detailed, contextual narratives of employees' emotional experiences, coping strategies, and perceptions of organizational support. Combining these two types of data makes the case study more valid by connecting statistical trends to real-life situations.

In general, the descriptive case study design was the best choice for this research because it lets us look at work-related stress in a real organizational setting without changing any variables. It also gives us useful empirical evidence that can help shape

organizational policy, mental health support systems, and improvements at the industry level in Kenya's aviation sector.

3.3 Research Site

The study was conducted in Nairobi, Kenya, a major aviation hub in East Africa, where aviation personnel operate within strict regulatory, scheduling, and safety demands (Goh et al., 2015). Nairobi hosts Kenya's primary aviation infrastructure, including Jomo Kenyatta International Airport and Wilson Airport, and accommodates diverse aviation service providers and technical support entities (Mugenda & Mugenda, 2003).

The specific study site was ALS Ltd., located at Wilson Airport. Wilson Airport is situated in the Lang'ata Sub-County of Nairobi County, approximately 5 kilometres southwest of Nairobi Central Business District, the capital city of Kenya (Kenya Airports Authority (KAA), 2023). The airport serves as one of the busiest airports in East Africa for domestic, charter, humanitarian, training, and general aviation operations. Wilson Airport is strategically located adjacent to Nairobi National Park and is surrounded by residential, commercial, educational, and aviation-related establishments that support a vibrant economic environment (KAA, 2023). The airport hosts numerous aviation operators, aircraft maintenance organizations, flight training schools, humanitarian aviation agencies, and aviation support service providers, making it a critical hub for aviation activities in Kenya.

Lang'ata Sub-County is a predominantly urban area characterized by mixed socio-economic populations ranging from middle-income to upper-middle-income households. The area benefits from relatively developed infrastructure, access to social amenities, and proximity to Nairobi's major commercial and administrative centres. Nairobi County is

Kenya's largest urban economy and serves as the country's principal financial, administrative, transportation, and industrial centre, attracting a diverse and highly skilled workforce from different professional backgrounds (Kenya National Bureau of Statistics (KNBS), 2019).

ALS Ltd. employs a heterogeneous workforce comprising pilots, engineers, flight operations staff, cabin crew, and administrative personnel, whose roles are characterized by high expectations, shifting schedules, and safety-critical responsibilities (Chandra & Rani, 2020; Goh et al., 2015). The organization's structure allows examination of stress exposures across operational and administrative roles, and its approval for participation supports the feasibility of data collection. The selection of ALS Ltd. as the study site was appropriate because it operates within a highly regulated and safety-sensitive aviation environment where employees are exposed to demanding workloads, irregular schedules, operational pressures, and complex organizational responsibilities that are relevant to the study of work-related stress and mental health (Aircraft Leasing Services Limited, 2025).

3.4 Target population

The target population for this study comprised all employees of Aircraft Leasing Services Limited (ALS Ltd.) in Nairobi, including pilots, aircraft engineers, flight attendants, flight operations officers, and administrative staff. These occupational categories were selected because they represent the key operational and administrative functions within the organization and are exposed to varying levels of work-related stress arising from different job demands and responsibilities.

Employees with a minimum of one year of service were eligible to participate to ensure adequate exposure to workplace conditions. Employees on extended leave or unwilling to provide informed consent were excluded.

According to ALS Ltd. internal human resource records (2025), the company has approximately 392 employees distributed across these job categories.

3.5 Study Sample

The study sample was the specific group of individuals chosen from the total target population of 392 employees at ALS Ltd. The sample consisted of persons from several professional categories, including pilots, engineers, technicians, flight attendants, flight operations officers, and administrative staff. Selecting a representative sample was essential to ensure that the study's results accurately reflect the variety of experiences, stressors, and mental health outcomes throughout the larger employee population.

A systematic and structured sampling procedure was employed to enhance the reliability and validity of the findings. The research utilized both stratified random sampling and purposive sampling techniques, depending on the nature of the data collected. Stratified random sampling was utilized in the quantitative phase to ensure fair representation across occupational categories, while purposive sampling guided the qualitative phase to gather in-depth insights from individuals experiencing heightened work-related stress.

3.5.1 Sampling Procedure

The research utilized a stratified sampling methodology to guarantee that all significant employee groups within ALS Ltd. were sufficiently represented. Stratified sampling is appropriate when the population is heterogeneous and consists of separate

subgroups that may respond differentially to the research variables (Creswell & Creswell, 2018). The study population comprised 392 employees categorized into five strata based on job function: pilots, engineers and technicians, flight attendants, flight operations officers, and administrative staff. Proportionate stratified sampling was used to select participants from each stratum according to its size in the population, ensuring adequate representation of all employee categories and enhancing the representativeness of the sample.

For the qualitative aspect of the study, purposive sampling was utilized. This method is suitable when the researcher aims to locate volunteers with particular qualities or experiences pertinent to the research aims (Rubin & Rubin, 2012). In this study, employees who indicate high levels of work-related stress in the quantitative survey were chosen for semi-structured interviews. This method enabled the researcher to attain a more profound understanding of the lived experiences, coping mechanisms, and psychological effects of stress on the individuals most impacted.

The study conformed to the mixed-methods methodology by employing stratified sampling for the quantitative phase and purposive sampling for the qualitative phase. This combination guaranteed both breadth and depth: a statistical picture of the whole workforce and detailed, context-specific tales from employees experiencing elevated stress levels. As a result, the sampling methods made the study's results more credible, trustworthy, and useful in the aviation industry.

3.5.2 Study Sample Size

The study's sample size was determined using Yamane's (1967) approach for finite populations. This generated a statistically accurate and achievable estimate of how many persons were needed to represent the full target population:

$$n = \frac{N}{\{1 + N(e)^2\}}$$

Where:

n= required sample size

N=total population

e=margin of error (0.05 for a 95% confidence level)

Substituting the values into the formula gives:

$$n = \frac{392}{\{1 + 392(0.05)^2\}}$$

$$n = \frac{392}{\{1+392(0.0025)^2\}} = \frac{392}{1.98} \approx 198$$

To account for possible non-response and ensure adequate representation across all strata, the sample size was rounded up to 199 participants.

For the quantitative phase of the investigation, the smallest sample size needed was about 199 people. This number made sure that the sample accurately represents the whole population, with a 95% confidence level and a 5% margin of error.

To keep the sample representative of all the different roles in the organization, the 199 participants were divided among the five job categories that ALS Ltd. has identified:

pilots, engineers and technicians, flight attendants, flight operations officers, and administrative staff.

During the qualitative phase, 12 participants who reported high levels of work-related stress during the quantitative survey were purposively selected for semi-structured interviews. The selection of 12 participants was considered adequate for obtaining in-depth insights into employees' experiences, coping strategies, and perceptions of organizational support while allowing for thematic saturation.

According to guidelines for descriptive case-study methodologies in applied social science research, the study combines a statistically defined sample with a purposeful qualitative subset. This strikes a compromise between quantitative generalizability and qualitative depth.

Table 3.1: Sampling Frame

Stratum (Job category)	Population	Proportion of N	Allocated sample
Pilots	105	26.79%	53
Flight attendants	45	11.48%	24
Engineers and technicians	170	43.37%	86
Flight operations officers	28	7.14%	14
Administrative staff	44	11.22%	22
Total	392	100%	199

The sample allocation was performed proportionately to ensure that each occupational category was represented according to its contribution to the overall population. This approach enhanced the representativeness of the sample and increased the likelihood that the findings accurately reflected the experiences of employees across different job functions within ALS Ltd.

3.6 Data Collection

This section outlines the methods and tools used to collect both quantitative and qualitative data for the study. Collecting data is an important part of the research process because it gives the analysis and interpretation an empirical foundation. In accordance with the descriptive case study design and mixed-methods approach, the study incorporated both questionnaires and semi-structured interviews to gather comprehensive data from participants. The combination of these tools makes it easier to triangulate data, which increases validity and ensures that the results show both measurable trends and individual experiences of work-related stress and mental health among employees at ALS Ltd.

3.6.1 Data Collection Instruments

To get numerical data from a group of 199 employees at ALS Ltd. for the quantitative part of the study, a structured questionnaire was employed. The questionnaire consisted of six primary components, each designed to meet a specific study objective and to use proven instruments to ensure reliability and validity. The first part is focused on socio-demographic information like age, gender, marital status, level of education, type of job, years of work experience, and work schedule. These variables can assist in contextualizing disparities in stress and mental health outcomes among employee subgroups and facilitate comparison analysis (Creswell & Creswell, 2018).

The second part used standardized items from the Work-Related Stress Questionnaire (WRSQ), a validated tool for measuring job pressure, time limits, task intensity, and how people feel about their workload. These items were utilized without modification to their fundamental structure to preserve the instrument's established

validity. This section operationalized Objective 1 by assessing workload-related stress among aviation professionals.

The third part assessed work–life balance utilizing validated items from the WRSQ components. These items assessed the extent to which employees can balance professional duties with personal commitments. Other items that were used assessed aspects like how well one gets enough rest, how much time one has for personal life, the stress of balancing job and family, and emotional strain. This section directly supports Objective 2 by showing how work-life balance affects mental health (Sharma & Cooper, 2023).

The fourth segment used psychosocial work environment measures that have already been tested to assess the work environment in terms of physical, interpersonal, and organizational variables. Items examined safety conditions, communication, team cohesion, supervisor support, and organizational climate, critical elements recognized to influence mental health in aviation contexts (Kelloway et al., 2023). This part supports Objective 3, which is to look into how the work environment affects mental health.

The fifth segment used WRSQ-based items to measure job demand. These items looked at elements such as organizational expectations, emotional labor, role ambiguity, performance pressure, and cognitive strain. This part is in line with Objective 4 because it looks at how employment demands affect mental health. All items in sections two through five were provided using a five-point Likert scale ranging from “strongly disagree” to “strongly agree.” This method provides for meaningful measurement of views and makes it easier to do inferential statistical analysis (Creswell & Creswell, 2018).

The last part used the General Health Questionnaire (GHQ-12), a well-known test for psychological discomfort, to measure the dependent variable, mental health. The GHQ-

12 was given and scored according to its usual rules, with no changes, to keep its validity and reliability (Goldberg & Williams, 1988). This measure accurately detects symptoms like anxiety, depression, diminished functioning, and emotional distress.

A semi-structured interview guide was employed to gather narrative data from around 12 purposefully selected individuals for the qualitative portion of the study. Purposive sampling was suitable as it facilitates the inclusion of individuals who indicated elevated levels of work-related stress on the quantitative survey, hence yielding valuable and pertinent insights (Rubin & Rubin, 2012). The interview guide included open-ended questions that looked into participants' real-life experiences, how they deal with stress, how they get help from their organizations, and how to make mental health interventions in the aviation industry better. With the approval of the participants, interviews were audio-recorded and transcribed word-for-word so that thematic analysis may be done correctly.

Using both structured surveys and semi-structured interviews gave the study both the breadth needed for quantitative generalizations and the depth needed for qualitative understanding. This integration embodies the tenets of mixed-methods research, which promotes the amalgamation of quantitative and qualitative data to yield a holistic, multidimensional comprehension of a research issue (Johnson & Onwuegbuzie, 2004).

3.6.2 Instrument Pretesting

Before data collection, the researcher conducted instrument pretesting to assess the clarity, reliability, and validity of the data-gathering tools. Instrument pretesting ensures that questionnaire items and interview prompts are well-structured, unambiguous, and aligned with the study objectives (Mugenda & Mugenda, 2003).

The pretest involved approximately 10% of the targeted sample of 199 and was conducted among aviation professionals employed at Skyward Express, a Nairobi-based airline operating under similar regulatory and operational conditions as ALS Ltd. This approach prevents contamination of the main study sample while ensuring comparable work environments.

During the pretesting phase, participants completed the structured questionnaire to evaluate item clarity, relevance, organization, and reliability. A smaller subset of three to five participants took part in brief semi-structured interviews to assess the coherence and flow of the qualitative interview guide. Feedback from the pretest was used to refine wording, eliminate ambiguity, improve usability, and ensure alignment with the study's objectives. Conducting instrument pretesting enhances the credibility, accuracy, and dependability of the research instruments and ensures their suitability for use in the aviation context (Creswell & Creswell, 2018; Bryman, 2016).

3.6.3 Instrument Reliability

Reliability is the extent to which a research instrument produces consistent, stable, and predictable results when assessing a construct under comparable conditions (Kothari, 2014). This study evaluated the dependability of both quantitative and qualitative data collection instruments to ensure measurement precision. The quantitative tools, namely the Work-Related Stress Questionnaire (WRSQ) and the General Health Questionnaire (GHQ-12), have exhibited robust dependability in prior research, affirming their appropriateness for the present study.

Many people throughout the world have tested and confirmed the GHQ-12. A comprehensive study comprising 3,020 Chinese healthcare workers indicated a Cronbach's

alpha of 0.892, a split-half reliability of 0.843, and item-total correlations ranging from 0.465 to 0.762, demonstrating exceptional internal consistency (Li et al., 2021). A meta-analysis of GHQ-12 subscales performed in North America and Europe yielded Cronbach's alpha values of 0.72 for anxiety/depression and 0.82 for social dysfunction, indicating reliability across various cultural and occupational contexts (Drapeau et al., 2023). This research substantiates its reliability in assessing psychological discomfort in high-demand occupational settings, such as aviation.

Likewise, stress instruments closely associated with the WRSQ; such as the Work Stress Questionnaire (WSQ) and other validated work-related stress assessments; have demonstrated satisfactory test–retest reliability scores among occupational cohorts. For instance, the WSQ exhibited robust face validity and satisfactory reliability when administered to Swedish male employees (Abma et al., 2019). In the Japanese validation of the New Brief Job Stress Questionnaire, test–retest reliability coefficients surpassed 0.50, demonstrating adequate reliability for stress-related categories, including job demand and job strain (Inoue et al., 2014). These data collectively confirm that standardized stress instruments yield consistent results and can be ethically changed without undermining dependability.

For the subscales that measured workload, work-life balance, work environment, job demand, and mental health, Cronbach's alpha (α) was used to assess internal consistency. Gliem & Gliem (2003) assert that an α value of 0.70 or above is deemed appropriate for social science research. After pilot testing, the data were input into the Statistical Package for the Social Sciences (SPSS) to calculate reliability coefficients. To

make the instrument more reliable, items that did not demonstrate good internal consistency were changed or taken out.

For the qualitative part, reliability was guaranteed by agreement amongst raters and dependability of the procedures. Two professionals in counseling and organizational psychology independently assessed the interview guide to ensure that the questions were unambiguous, non-leading, and consistent with the study's objectives. To make sure that everything is clear and can be repeated, as Lincoln and Guba (1985) suggest, an audit trail was kept that shows methodological choices, interview processes, and field notes.

The study guarantees that its quantitative and qualitative instruments yield reliable and replicable results through the implementation of these dependability processes.

3.6.4 Instrument Validity

Validity relates to how well a tool measures the construct it is supposed to test, which makes sure that the results are relevant and trustworthy (Creswell & Creswell, 2018). Before full data collection, this project used several validation methods to check the validity of the quantitative questionnaire and qualitative interview guide.

An expert review determined the content validity of the quantitative instrument. Counseling psychology, aviation occupational health, and research methodology experts from Africa Nazarene University looked at the questionnaire items to see if they cover the main variables: workload, work-life balance, work environment, job demand, and mental health (Mugenda & Mugenda, 2003). Their feedback was utilized to improve clarity, eliminate vague statements, and guarantee conformity with study objectives.

Construct validity was assessed by analyzing the correlation between questionnaire items and the theoretical frameworks that inform the study: the Transactional Model of

Stress and Coping (Lazarus & Folkman, 1984), the Job Demand–Resources (JD-R) Model (Demerouti et al., 2001), and the Workplace Mental Health and Well-Being Framework (Kelloway et al., 2023). Items that measure stress assessment, job expectations, and coping fit well with the Transactional Model and JD-R theory. Items that measure organizational support fit well with the Workplace Mental Health Framework. This theoretical triangulation made sure that the tool covers all the conceptual areas that are important to work-related stress and mental health.

Criterion validity of the study questionnaire was assessed by comparing it with established psychometric instruments such as the GHQ-12 and occupational stress measures, including the WSQ/WRSQ. The GHQ-12 exhibits robust criterion validity across various cultures and industries, indicating considerable correlation with clinical evaluations of anxiety, depression, and general psychological distress (Li et al., 2021; Drapeau et al., 2023). Likewise, validated work-stress measures have demonstrated predictive validity in occupational contexts, affirming their efficacy in identifying persons susceptible to burnout, absenteeism, and emotional exhaustion (Abma et al., 2019; Inoue et al., 2014). These comparisons show that it is appropriate to use standardized tools in this study to keep it scientifically sound.

Face validity, content validation, and credibility approaches all helped make the qualitative part more valid. Two experts looked over the interview guide to make sure that the questions cover important topics related to mental health and work stress. A pilot interview was conducted to verify the clarity and interpretability of the questions. During the actual data collection, the researcher employed member checking, which enables participants to evaluate and validate the accuracy of transcribed data, and triangulation,

which involves cross-referencing qualitative insights with quantitative results to boost validity (Lincoln & Guba, 1985).

These strict validation steps make sure that all the tools utilized in this study are correct, based on theory, and able to produce results that are legitimate and easy to understand.

3.6.5 Data Collection Procedures

Before data collection commenced, the researcher obtained ethical clearance from Africa Nazarene University, a research permit from the National Commission for Science, Technology and Innovation (NACOSTI), and organizational authorization from Aircraft Leasing Services Limited (ALS Ltd.). Once the study was approved, the researcher met with the selected participants to explain the study's purpose, goals, confidentiality, and voluntary nature. After that, the participants signed informed consent forms.

During the quantitative phase, the researcher administered structured questionnaires to a group of 199 people from different types of jobs, such as pilots, engineers, technicians, flight attendants, flight operations officers, and administrative staff. To accommodate the employees' varying work schedules and minimize operational disruptions, the structured questionnaire was administered digitally through a secure Google Forms link, which participants could conveniently access using their smartphones or workplace devices. This approach enhances accessibility, promotes timely responses, and ensures efficient data collection across different duty shifts. Participants were given one week to complete and submit the questionnaires. Completed questionnaires were collected and securely stored in a protected physical file and an encrypted digital folder to ensure participant confidentiality and data privacy.

After the quantitative data collection is done, the qualitative phase began. For the qualitative component, purposive sampling was used because it allows the researcher to intentionally select participants who possess specific characteristics, particularly those reporting high levels of work-related stress, thereby ensuring that the interviews capture individuals with direct, relevant experiences that align with the study's qualitative objectives. Twelve participants were invited to take part in semi-structured interviews to provide deeper insights into the quantitative findings. Interviews were conducted either in a private setting within ALS Ltd. or through a secure online platform, depending on participants' preferences. Each interview lasted approximately 30 to 45 minutes and was audio-recorded with participants' consent. The researcher wrote down field notes to keep track of non-verbal cues and data about the setting. After that, the audio recordings were typed up word-for-word for thematic analysis.

To make sure the data is accurate and triangulated, the quantitative and qualitative stages were done one after the other. The surveys were examined to identify significant patterns and relationships. These then helped us decide what to focus on in the interviews. This sequential explanatory method lets qualitative results explain and make clearer patterns found in quantitative outcomes (Creswell & Plano Clark, 2018). During the study, the researcher maintained confidentiality, used coded identification numbers instead of names, and ensured that all data were securely stored and accessible only to the researcher.

This systematic technique guaranteed complete, ethical, and methodologically rigorous data gathering, hence augmenting the validity and dependability of the research findings.

3.7 Data Processing and Analysis

Data processing and analysis are important parts of this study because they turn the raw data that was collected into useful information that meets the study's goals. The research used both quantitative and qualitative data analysis methodologies, as its mixed-methods framework calls for. Data from the questionnaires and interviews were collected and analyzed separately before being integrated to provide a comprehensive understanding of how work-related stress affects the mental health of employees at ALS Ltd.

3.7.1 Quantitative Data Processing and Analysis

The quantitative data gathered from the structured questionnaires were first coded and entered into the Statistical Package for the Social Sciences (SPSS) version 26 for analysis. Data were cleaned to find mistakes, missing answers, and differences. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize the demographic characteristics and analyze the response patterns for each study variable.

This study used inferential statistics to look at the relationships between the independent factors (workload, work–life balance, work environment, and job demand) and the dependent variable (mental health) in order to meet its specific goals. The Pearson Product–Moment Correlation Coefficient (r) was employed to determine the strength and direction of the relationships between the study variables. Multiple linear regression analysis was conducted to determine the extent to which work-related stressors predict employees' mental health outcomes. Statistical significance was established at $p < 0.05$.

Tables, graphs, and charts were used to present the results in a way that is easy to understand and compare. This quantitative data provided measurable insights into the extent to which work-related stress affects the mental health of ALS Ltd. personnel.

3.7.2 Qualitative Data Processing and Analysis

The researcher used thematic analysis, as described by Braun and Clarke (2006), on the qualitative data collected from semi-structured interviews. The audio-recorded interviews were transcribed verbatim. They read the transcripts numerous times to get acquainted with the data. Following initial coding, themes related to stress experiences, coping strategies, perceptions of organizational support, and mental health experiences were identified, reviewed, and categorized.

The qualitative data were analyzed manually using thematic analysis. NVivo software was available to support data organization and coding where necessary. The analysis was guided by the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984), the Job Demand–Resources (JD-R) Model (Bakker & Demerouti, 2007), and the Workplace Mental Health and Well-Being Framework (World Health Organization, 2023). These theoretical lenses assisted in interpreting how stressors, coping mechanisms, organizational resources, and mental health outcomes interact within the aviation context.

3.7.3 Integration of Quantitative and Qualitative Findings

During the interpretation phase, the quantitative and qualitative results from the study were combined to give a full understanding of the study subject. The sequential explanatory design made this integration process easier by using qualitative data to explain and put into context the statistical links found in the quantitative phase (Creswell & Plano

Clark, 2018). This strategy facilitated triangulation of findings and ensured that the results were both statistically supported and contextually meaningful.

The combined data analysis provided the study with more statistical support and narrative depth, which helped it make better recommendations for managing stress at work and improving mental health in the aviation industry.

3.8 Legal and Ethical Considerations

This study adhered to established legal and ethical principles governing research involving human participants. Ethical considerations were important in protecting the rights, dignity, safety, and well-being of participants while maintaining professional and academic integrity throughout the research process. The researcher got the necessary ethical approvals before commencing data collection, in line with Africa Nazarene University's Research Ethics Policy and the stipulations of the National Commission for Science, Technology, and Innovation (NACOSTI).

Before data collection commenced, the researcher obtained ethical clearance from Africa Nazarene University, a research permit from NACOSTI, and formal authorization from ALS Ltd. to conduct the study. Permission was also obtained from the Human Resource Department to access relevant personnel for participation. The researcher ensured compliance with all institutional and national requirements relating to ethical research conduct and data protection.

All participants received a comprehensive informed consent form that clearly outlines the study's objectives, procedures, potential risks, and anticipated benefits. Participants were informed that their involvement was entirely voluntary and that they were under no obligation to participate. They were also explicitly told that they may withdraw

from the study at any stage, without providing any reason and without facing any penalties, negative consequences, or loss of benefits.

To protect participants' privacy and anonymity, their names were not included in any surveys, interview transcripts, or study reports. Data recording and analysis used identification codes. All data, whether digital or physical, were kept safe. Digital data were encrypted and password-protected, while hard-copy documents were stored in a locked cabinet accessible only to the researcher. In accordance with Africa Nazarene University research guidelines, the data will be retained for a period of five years after completion of the study and thereafter permanently destroyed.

Participant welfare remained a priority throughout the study. The researcher put the privacy and health of the subjects first. The study covers sensitive subjects such as mental health and work-related stress; therefore, measures were taken to ensure that no participant endures psychological distress during their participation. Where necessary, participants would be referred to appropriate counseling or employee wellness services for additional psychological support. The researcher maintained academic integrity by avoiding plagiarism, properly attributing all sources, and reporting findings truthfully and accurately. The study adhered to the ethical principles outlined by the American Psychological Association (APA, 2017), including respect for persons, beneficence, justice, integrity, and professional responsibility.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter presents the results of the study and provides a presentation of the findings in relation to the study objectives. The analysis is based on data collected from employees at ALS Ltd. and is organized into descriptive and inferential sections. Descriptive results summarize respondents' characteristics and key study variables, while inferential analysis examines the relationships between workload, work-life balance, work environment, job demand conditions, and mental health outcomes.

The results are organized into descriptive statistics, inferential statistics, and qualitative findings. The chapter also presents findings related to each study objective and demonstrates the effect of work-related stress factors on the mental health of employees at ALS Ltd.

4.2 Response Rate

This section presents the response rate achieved during data collection. The response rate was determined by comparing the number of questionnaires returned to the number of questionnaires distributed to the sampled employees. The results are presented in Table 4.1.

Table 4.1: Rate of Response

	Frequency	**Percentage**
Response	158	79.4
Non-Response	41	20.6
Total	**199**	**100.0**

Table 4.1 shows that out of the 199 questionnaires issued to the sampled employees, 158 were returned, resulting in a response rate of 79.4%, while 41 questionnaires (20.6%) were not returned. The specific reasons for non-response were not documented. However, given the operational nature of the aviation industry, non-response may have been influenced by employees' work schedules and availability during the data collection period. Holtom et al. (2022), in a review of 1,014 surveys published in 703 articles across 17 journals, reported that average response rates increased to about 68% in 2020. In this study, the 79.4% return rate therefore indicates that the findings can be regarded as based on sufficient participant representation, with a reduced risk of serious non-response error. Consequently, the data obtained from the 158 respondents were considered suitable for further statistical analysis and interpretation in relation to the study objectives.

4.3 Demographic Information

This section presents the demographic characteristics of the respondents to provide context for interpreting the study findings. It summarizes key attributes including gender, age group, job role, length of employment, employment type, and work schedule among employees at ALS Ltd. These variables are important in understanding the composition of the sample and in assessing how representative it is of the target population. The demographic profile also provides context for understanding the characteristics of the respondents who participated in the study.

4.3.1 Distribution of Respondents by Gender

This section presents the distribution of respondents by gender. Gender information was collected to describe the demographic characteristics of the respondents and provide context for interpreting the study findings. The results are presented in Table 4.2.

Table 4.2: Distribution of Respondents by Gender

	Frequency	Percent
Male	93	58.9
Female	63	39.9
Prefer not to say	2	1.2
Total	158	100.0

Table 4.2 shows that the majority of respondents were male, accounting for 93 participants (58.9%). Female respondents comprised 63 participants (39.9%), while 2 (1.2%) respondents preferred not to disclose their gender. The findings indicate that male respondents constituted the largest proportion of the study sample, accounting for 58.9% of all respondents. Table 4.3 presents respondents' mental health status by gender and the corresponding Chi-square test results.

Table 4.3: Gender and Mental Health Status

			Mental Health Status			
			Good	Mild	Moderate	Total
Gender	Male	Count	31	77	1	109
		% within Gender	28.4%	70.6%	0.9%	100.0%
		% within Mental health Status	67.4%	70.6%	33.3%	69.0%
	Female	Count	15	31	1	47
		% within Gender	31.9%	66.0%	2.1%	100.0%
		% within Mental health Status	32.6%	28.4%	33.3%	29.7%
	Prefer not to say	Count	0	1	1	2
		% within Gender	0.0%	50.0%	50.0%	100.0%
		% within Mental health Status	0.0%	0.9%	33.3%	1.3%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.873[a]	4	.000
Likelihood Ratio	6.841	4	.145
Linear-by-Linear Association	.386	1	.534
N of Valid Cases	158		

Table 4.3 shows that the majority of respondents across all gender categories reported mild psychological distress (69.0%), followed by good mental health (29.1%), while only 1.9% experienced moderate psychological distress. Among males, 70.6% reported mild psychological distress and 28.4% reported good mental health, compared to 66.0% and 31.9%, respectively, among females. Although females had a slightly higher proportion of good mental health than males, the overall pattern of mental health status was similar across the two groups. The Pearson Chi-square test indicated a statistically significant association between gender and mental health status ($\chi^2 = 25.873$, $p < .001$).

4.3.2 Distribution of Respondents by Age Group

This section presents the distribution of respondents by age group. Age information was collected to describe the demographic characteristics of the respondents and provide context for the study findings. The results are presented in Figure 4.1.

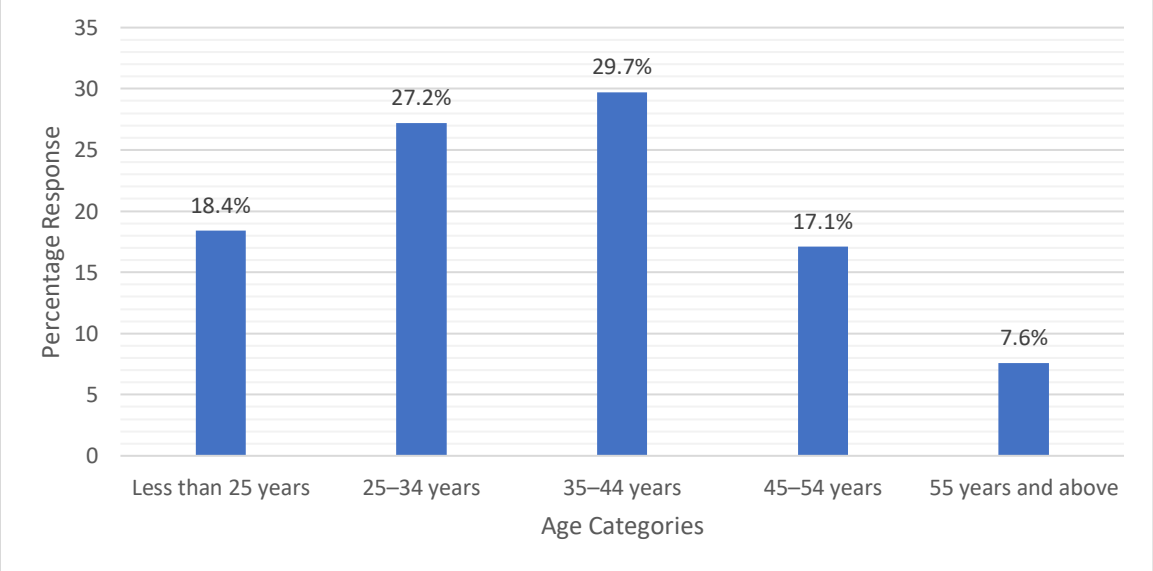


Figure 4.1: Distribution of respondents by Age group

Figure 4.1 shows that the largest proportion of respondents fell within the 35–44-year age category, accounting for 29.7% of the respondents. This was followed by respondents aged 25–34 years at 27.2%, while those aged 18–24 years accounted for 18.4%. Respondents aged 45–54 years represented 17.1% of the sample, while those aged 55 years and above constituted 7.6%. The findings indicate that the majority of respondents were between 25 and 44 years of age. Table 4.4 presents respondents' mental health status across age groups and the corresponding Chi-square test results.

Table 4.4: Age Group and Mental Health Status

		Mental health Status			
Age group		Good	Mild	Moderate	Total
Less than 25 years	Count	8	19	2	29
	% within Age group	27.6%	65.5%	6.9%	100.0%
	% within Mental health Status	17.4%	17.4%	66.7%	18.4%
25–34 years	Count	12	30	1	43
	% within Age group	27.9%	69.8%	2.3%	100.0%
	% within Mental health Status	26.1%	27.5%	33.3%	27.2%
35–44 years	Count	15	32	0	47
	% within Age group	31.9%	68.1%	0.0%	100.0%
	% within Mental health Status	32.6%	29.4%	0.0%	29.7%
45–54 years	Count	7	20	0	27
	% within Age group	25.9%	74.1%	0.0%	100.0%
	% within Mental health Status	15.2%	18.3%	0.0%	17.1%
55 years and above	Count	4	8	0	12
	% within Age group	33.3%	66.7%	0.0%	100.0%
	% within Mental health Status	8.7%	7.3%	0.0%	7.6%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)

Pearson Chi-Square	5.999[a]	8	.647
Likelihood Ratio	6.070	8	.639
Linear-by-Linear Association	.607	1	.436
N of Valid Cases	158		

Table 4.4 shows that mild psychological distress was the predominant mental health status across all age groups, ranging from 65.5% among respondents aged 18–24 years to 74.1% among those aged 45–54 years. The proportion of respondents with good mental health ranged from 25.9% to 33.3%, while moderate psychological distress was uncommon (1.9% overall) and was observed only among respondents aged 18–24 years (6.9%) and 25–34 years (2.3%). The Pearson Chi-square test showed no statistically significant association between age group and mental health status ($\chi^2 = 5.999$, df = 8, p = .647).

4.3.3 Distribution of Respondents by Job Role

This section presents the distribution of respondents according to their job roles within Aircraft Leasing Services Limited (ALS Ltd.). The information was collected to describe the occupational characteristics of the respondents who participated in the study. The results are presented in Figure 4.2.

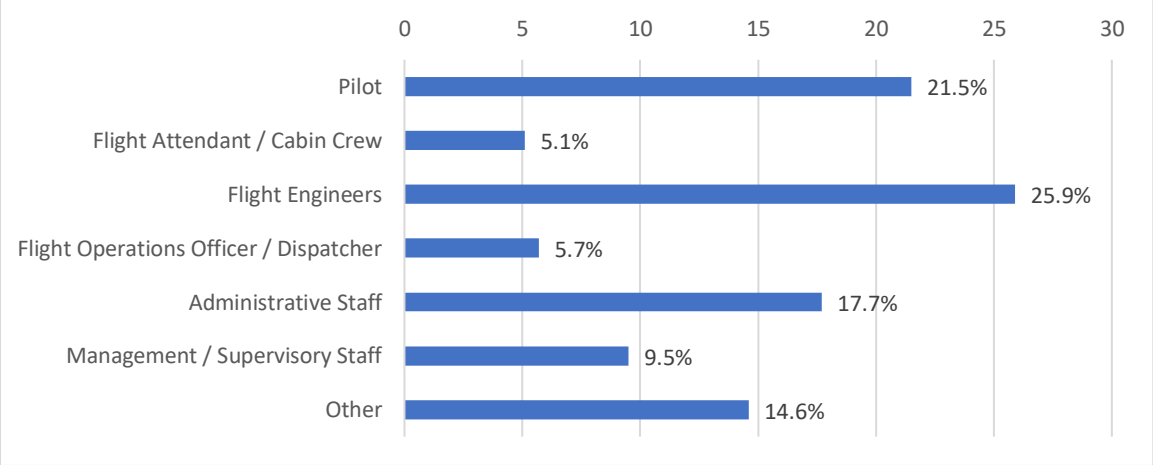


Figure 4.2: Distribution of respondents by Job Role

Figure 4.2 shows that engineers and maintenance staff constituted the largest group of respondents, accounting for 22.7% of the sample. Pilots represented 21.5% of the respondents, while administrative staff accounted for 17.7%. Respondents classified under other roles constituted 14.6% of the sample. Management or supervisory staff accounted for 9.5%, while flight operations officers and cabin crew represented 5.7% and 5.1% respectively. Maintenance staff accounted for 3.2%. The findings indicate that engineers and maintenance personnel formed the largest occupational category among the respondents. Table 4.5 presents respondents' mental health status across job roles at ALS Ltd. and the corresponding Chi-square test results.

Table 4.5: Job Role and Mental Health Status

		Mental health Status			
Job role at ALS Ltd		Good	Mild	Moderate	Total
Pilot	Count	7	25	2	34
	% within Job role at ALS Ltd	20.6%	73.5%	5.9%	100.0%
	% within Menta health Status	15.2%	22.9%	66.7%	21.5%
Flight Attendant / Cabin Crew	Count	1	7	0	8
	% within Job role at ALS Ltd	12.5%	87.5%	0.0%	100.0%
	% within Mental health Status	2.2%	6.4%	0.0%	5.1%
Engineer	Count	16	25	0	41
	% within Job role at ALS Ltd	39.0%	61.0%	0.0%	100.0%
	% within Mental health Status	34.8%	22.9%	0.0%	25.9%
Flight Operations	Count	1	8	0	9
	% within Job role at ALS Ltd	11.1%	88.9%	0.0%	100.0%

Officer / Dispatcher	% within Mental health Status	2.2%	7.3%	0.0%	5.7%
Administrative Staff	Count	7	21	0	28
	% within Job role at ALS Ltd	25.0%	75.0%	0.0%	100.0%
	% within Mental health Status	15.2%	19.3%	0.0%	17.7%
Management / Supervisory Staff	Count	4	10	1	15
	% within Job role at ALS Ltd	26.7%	66.7%	6.7%	100.0%
	% within Mental health Status	8.7%	9.2%	33.3%	9.5%
Other	Count	10	13	0	23
	% within Job role at ALS Ltd	43.5%	56.5%	0.0%	100.0%
	% within Mental health Status	21.7%	11.9%	0.0%	14.6%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14.597[a]	12	.264
Likelihood Ratio	15.170	12	.232
Linear-by-Linear Association	2.207	1	.137
N of Valid Cases	158		

Table 4.5 shows that mild psychological distress was the most common mental health status across all job roles, ranging from 56.5% among respondents in the 'Other' category to 88.9% among Flight Operations Officers/Dispatchers. Respondents classified as Engineers recorded the highest proportion of good mental health (39.0%), followed by those in the Other (43.5%) category, while Flight Attendants/Cabin Crew (12.5%) and Flight Operations Officers/Dispatchers (11.1%) recorded the lowest proportions. Moderate

psychological distress was rare (1.9% overall) and was reported only among Pilots (5.9%) and Management/Supervisory Staff (6.7%). The Pearson Chi-square test indicated no statistically significant association between job role and mental health status ($\chi^2 = 14.597$, df = 12, p = .264).

4.3.4 Distribution of respondents by Length of Employment

This section presents the distribution of respondents according to their length of employment at Aircraft Leasing Services Limited (ALS Ltd.). Information on tenure was collected to describe the employment characteristics of the respondents. The results are presented in Figure 4.3.

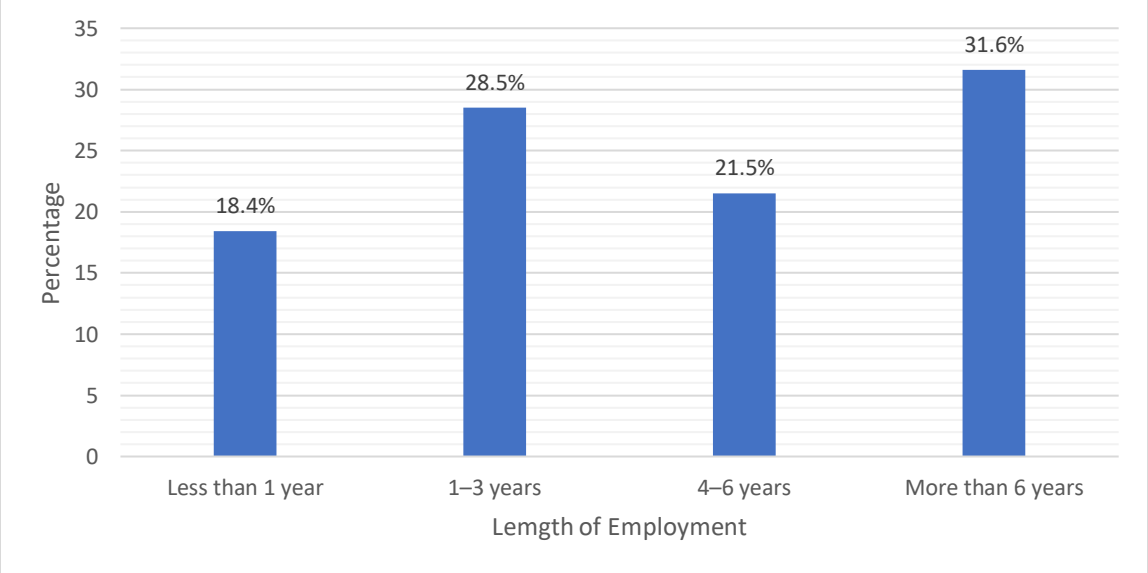


Figure 4.3: Distribution of respondents by Length of Employment

Figure 4.3 shows that the largest proportion of respondents had worked at ALS Ltd. for more than six years, accounting for 31.6% of the sample. Respondents who had worked for between one and three years constituted 28.5%, while those with four to six years of employment represented 21.5%. Employees who had worked for less than one year

accounted for 18.4% of the respondents. The findings indicate that the largest proportion of respondents had been employed at ALS Ltd. for more than six years. Table 4.6 presents respondents' mental health status by length of employment and the corresponding Chi-square test results.

Table 4.6: Job Role and Mental Health Status

			Mental health Status			
			Good	Mild	Moderate	Total
Length of employment	Less than 1 year	Count	4	23	2	29
		% within Length of employment	13.8%	79.3%	6.9%	100.0%
		% within Mental health Status	8.7%	21.1%	66.7%	18.4%
	1–3 years	Count	12	33	0	45
		% within Length of employment	26.7%	73.3%	0.0%	100.0%
		% within Mental health Status	26.1%	30.3%	0.0%	28.5%
	4–6 years	Count	13	20	1	34
		% within Length of employment	38.2%	58.8%	2.9%	100.0%
		% within Mental health Status	28.3%	18.3%	33.3%	21.5%
	More than 6 years	Count	17	33	0	50
		% within Length of employment	34.0%	66.0%	0.0%	100.0%
		% within Mental health Status	37.0%	30.3%	0.0%	31.6%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	10.771[a]	6	.096
Likelihood Ratio	11.462	6	.075
Linear-by-Linear Association	5.183	1	.023
N of Valid Cases	158		

Table 4.6 shows that mild psychological distress was the predominant mental health status across all employment categories, ranging from 58.8% among employees with 4–6 years of service to 79.3% among those with less than one year of employment. The highest proportion of respondents with good mental health was recorded among employees with 4–6 years of service (38.2%), followed by those with more than six years (34.0%), while respondents employed for less than one year had the lowest proportion (13.8%). Moderate psychological distress was uncommon (1.9% overall) and was reported only among employees with less than one year (6.9%) and 4–6 years (2.9%) of employment. The Pearson Chi-square test indicated no statistically significant association between length of employment and mental health status ($\chi^2 = 10.771$, $df = 6$, $p = .096$), suggesting that mental health status did not differ significantly by tenure. However, the significant linear-by-linear association ($\chi^2 = 5.183$, $p = .023$) indicates a possible linear trend between length of employment and mental health status, which may warrant further investigation.

4.3.5 Distribution of respondents by Employment Type

This section presents the distribution of respondents according to their employment type at Aircraft Leasing Services Limited (ALS Ltd.). Employment type information was collected to describe the employment characteristics of the respondents who participated in the study. The results are presented in Figure 4.4.

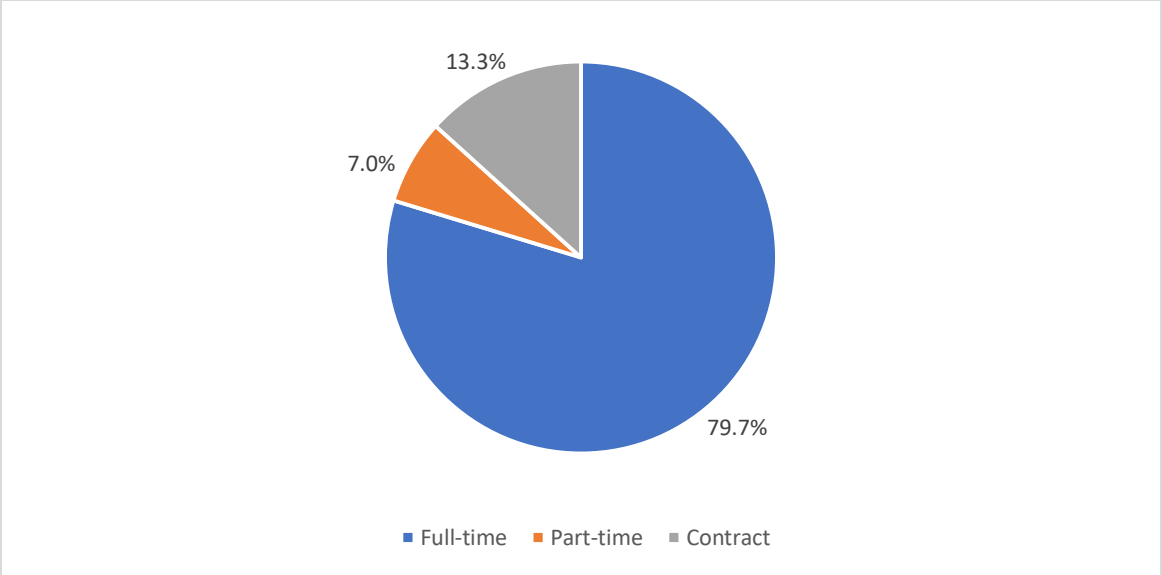


Figure 4.4: Distribution of Respondents by Employment Type

Figure 4.4 shows that the majority of respondents were full-time employees, accounting for 79.7% of the sample. Contract employees constituted 13.3% of the respondents, while part-time employees represented 7.0%. The findings indicate that full-time employees formed the largest proportion of the respondents. Table 4.7 presents respondents' mental health status by employment type and the corresponding Chi-square test results.

Table 4.7: Employment Type and Mental Health Status

			Mental health Status			
			Good	Mild	Moderate	Total
Employment type	Full-time	Count	37	87	2	126
		% within Employment type	29.4%	69.0%	1.6%	100.0%
		% within Mental health Status	80.4%	79.8%	66.7%	79.7%
	Part-time	Count	3	8	0	11
		% within Employment type	27.3%	72.7%	0.0%	100.0%
		% within Mental health Status	6.5%	7.3%	0.0%	7.0%
	Contract	Count	6	14	1	21

	% within Employment type	28.6%	66.7%	4.8%	100.0%
	% within Mental health Status	13.0%	12.8%	33.3%	13.3%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.236[a]	4	.872
Likelihood Ratio	1.179	4	.882
Linear-by-Linear Association	.111	1	.740
N of Valid Cases	158		

Table 4.7 shows that mild psychological distress was the predominant mental health status across all employment types, accounting for 69.0% of full-time employees, 72.7% of part-time employees, and 66.7% of contract employees. The proportion of respondents with good mental health was relatively similar across the three employment categories, ranging from 27.3% among part-time employees to 29.4% among full-time employees. Moderate psychological distress was uncommon (1.9% overall) and was reported only among full-time (1.6%) and contract employees (4.8%), with no cases recorded among part-time employees. The Pearson Chi-square test indicated no statistically significant association between employment type and mental health status ($\chi^2 = 1.236$, df = 4, p = .872).

4.3.6 Distribution of respondents by Work Schedule

This section presents the distribution of respondents according to their work schedules at Aircraft Leasing Services Limited (ALS Ltd.). Information on work schedules was collected to describe the working arrangements of the respondents who participated in the study. The results are presented in Figure 4.5.

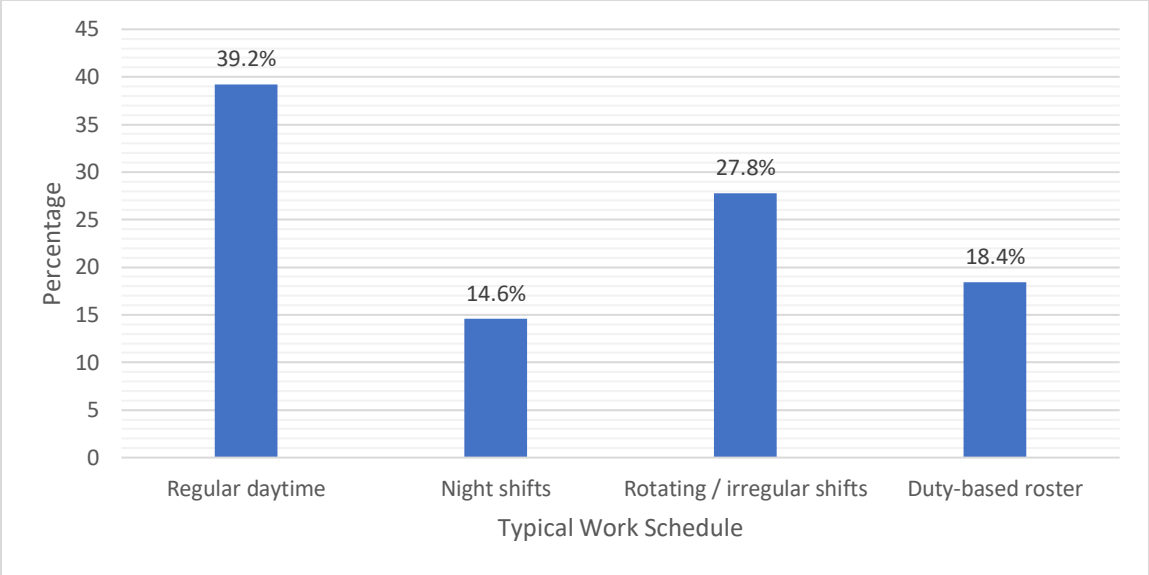


Figure 4.5: Distribution of Respondents by Work Schedule

Figure 4.5 shows that 39.2% of the respondents worked regular daytime schedules. Respondents working rotating or irregular shifts accounted for 27.8% of the sample, while those on duty-based rosters represented 18.4%. Employees working night shifts constituted 14.6% of the respondents. The findings indicate that regular daytime schedules were the most common work arrangement among the respondents. Table 4.8 presents respondents' mental health status by typical work schedule and the corresponding Chi-square test results.

Table 4.8: Work Schedule and Mental Health Status

Typical work schedule		Mental health Status			
		Good	Mild	Moderate	Total
Regular daytime	Count	22	39	1	62
	% within Typical work schedule	35.5%	62.9%	1.6%	100.0%
	% within Mental health Status	47.8%	35.8%	33.3%	39.2%
Night shifts	Count	6	17	0	23
	% within Typical work schedule	26.1%	73.9%	0.0%	100.0%
	% within Mental health Status	13.0%	15.6%	0.0%	14.6%
	Count	9	34	1	44

Rotating / irregular shifts	% within Typical work schedule	20.5%	77.3%	2.3%	100.0%
	% within Mental health Status	19.6%	31.2%	33.3%	27.8%
Duty-based roster	Count	9	19	1	29
	% within Typical work schedule	31.0%	65.5%	3.4%	100.0%
	% within Mental health Status	19.6%	17.4%	33.3%	18.4%
Total	Count	46	109	3	158
	% within Typical work schedule	29.1%	69.0%	1.9%	100.0%
	% within Mental health Status	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.871[a]	6	.694
Likelihood Ratio	4.306	6	.635
Linear-by-Linear Association	1.236	1	.266
N of Valid Cases	158		

Table 4.8 shows that mild psychological distress was the most prevalent mental health status across all work schedules, ranging from 62.9% among employees on regular daytime schedules to 77.3% among those working rotating or irregular shifts. Respondents working regular daytime schedules recorded the highest proportion of good mental health (35.5%), while those on rotating/irregular shifts had the lowest proportion (20.5%). Moderate psychological distress was rare (1.9% overall) and was reported among employees on regular daytime schedules (1.6%), rotating/irregular shifts (2.3%), and duty-based rosters (3.4%), with no cases observed among employees working night shifts. The Pearson Chi-square test indicated no statistically significant association between work schedule and mental health status ($\chi^2 = 3.871$, $df = 6$, $p = .694$).

4.4 Presentation of Research Analysis and Findings

4.4.1 Workload-Related Stress

The first objective of the study sought to determine the effect of workload-related stress on mental health among employees at ALS Ltd., Nairobi, Kenya. This section therefore examines workload-related stress and its association with mental health among employees. Data was collected using a Likert five-point scale questionnaire ranging from never to always. The results are as indicated in Table 4.9.

Table 4.9: Workload-Related Stress

	Mean	Std. Dev
I have unachievable deadlines in my aviation-related duties.	3.0063	1.01891
I have to work very intensively during my shifts.	2.9747	.92350
I have to neglect some tasks because I have too much work to do.	3.0063	.97417
I am unable to take sufficient breaks during my working day.	3.0000	.99681
I am pressured to work long hours.	2.9684	1.02467
I have to work very fast to meet operational demands.	3.0443	.95334
I experience unrealistic time pressures at work.	3.0316	.94714

Table 4.9 shows that the mean scores for workload-related stress items ranged from 2.9684 to 3.0443. The highest mean score was recorded for “I have to work very fast to meet operational demands” (M = 3.0443, SD = .95334), followed by “I experience unrealistic time pressures at work” (M = 3.0316, SD = .94714) and “I have unachievable deadlines in my aviation-related duties” (M = 3.0063, SD = 1.01891). The lowest mean score was recorded for “I am pressured to work long hours” (M = 2.9684, SD = 1.02467). Standard deviations ranged from .92350 to 1.02467 across all workload indicators.

4.4.2 Work-Life Balance-Related Stress

The second objective of the study was to establish the association between work-life balance-related stress and mental health among employees at ALS Ltd., Nairobi, Kenya. This section therefore examines work–life balance-related stress and its association with mental health among employees using a five-point agreement scale. The results are as indicated in Table 4.10.

Table 4.10: Work-Life Balance-Related Stress

	Mean	Std. Dev
I am able to balance my work responsibilities with my personal and family life.	2.9810	.94748
Work-related demands interfere with my responsibilities at home.	2.9557	.93988
I have enough time to rest and recover between shifts or duty periods.	2.9873	.99673
I often feel that work takes up so much of my time that I cannot do things I enjoy.	3.0190	.99343
My family or close relationships have been negatively affected by my work schedule.	2.9873	.94422

Table 4.10 shows that mean scores for work–life balance-related stress ranged from 2.9557 to 3.0190. The highest mean score was recorded for “I often feel that work takes up so much of my time that I cannot do things I enjoy” (M = 3.0190, SD = .99343). This was followed by “I have enough time to rest and recover between shifts or duty periods” (M = 2.9873, SD = .99673) and “My family or close relationships have been negatively affected by my work schedule” (M = 2.9873, SD = .94422). The lowest mean score was reported for “Work-related demands interfere with my responsibilities at home” (M = 2.9557, SD = .93988). Standard deviations ranged from .93988 to .99673.

4.4.3 Work Environment-Related Stress

The third objective of the study was to investigate the effect of the work environment-related stress on employees' mental health at ALS Ltd., Nairobi, Kenya. This section thus examines psychosocial and organizational aspects of the work environment and their association with mental health among employees using a five-point agreement scale. The results are as indicated on Table 4.11.

Table 4.11: Work Environment-Related Stress

	Mean	Std. Dev
My colleagues are willing to help me when work becomes difficult.	2.9810	1.01248
I can rely on my line manager/supervisor to help me with work-related problems.	2.9367	1.02008
I receive supportive feedback on the work I do.	3.0063	.96100
I receive the respect at work that I deserve from my colleagues.	3.0063	1.01264
Relationships between colleagues in my work area are strained.	2.9810	1.01248
I am subjected to unkind words or behavior (harassment) at work.	3.0380	1.00246
I am aware of others being subjected to bullying at work.	2.9873	.97083
If I reported bullying or harassment, I would be confident that it would be addressed.	3.0127	.97083
I feel supported when my work is emotionally demanding.	2.9367	1.01381

Table 4.11 shows that mean scores for work environment-related stress ranged from 2.9367 to 3.0380. The highest mean score was recorded for "I am subjected to unkind words or behavior (harassment) at work" (M = 3.0380, SD = 1.00246), followed by "If I reported bullying or harassment, I would be confident that it would be addressed" (M = 3.0127, SD = .97083). The items "I receive supportive feedback on the work I do" and "I receive the respect at work that I deserve from my colleagues" each recorded a mean score of 3.0063. The lowest mean scores were reported for "I can rely on my line manager/supervisor to help me with work-related problems" (M = 2.9367, SD = 1.02008)

and “I feel supported when my work is emotionally demanding” (M = 2.9367, SD = 1.01381). Standard deviations ranged from .96100 to 1.02008.

4.4.4 Job Demands-Related Stress

The fourth objective of the study was to analyze the association between job demand-related stress and mental health outcomes among employees at ALS Ltd., Nairobi, Kenya. This section accordingly examines job demand-related stress and its association with mental health among employees using a five-point agreement scale. The results are indicated in Table 4.12.

Table 4.12: Job Demands-Related Stress

	Mean	Std. Dev
I am clear about what is expected of me in my job.	2.9747	.97058
Different groups at work demand things from me that are hard to combine.	3.0000	.97091
I know how to go about getting my job done.	3.0380	1.05206
I have some say over the way I work.	3.0063	1.00633
I have sufficient opportunities to ask managers questions about changes at work.	3.0063	.98716
Staff are consulted about changes that affect their work.	2.9873	1.00943
When changes are made at work, I am clear how they will work out in practice.	3.0316	.94714

Table 4.12 shows that mean scores for job demand-related stress ranged from 2.9747 to 3.0380. The highest mean score was recorded for “I know how to go about getting my job done” (M = 3.0380, SD = 1.05206), followed by “When changes are made at work, I am clear how they will work out in practice” (M = 3.0316, SD = .94714). The lowest mean score was reported for “I am clear about what is expected of me in my job” (M = 2.9747, SD = .97058). Standard deviations ranged from .94714 to 1.05206 across all job demand-related indicators.

4.4.5 Mental Health (GHQ-12)

This section presents the mental health outcomes of respondents as measured using the General Health Questionnaire (GHQ-12). Descriptive statistics, including mean scores and standard deviations, were computed for each mental health indicator. The results are presented in Table 4.13.

Table 4.13: Mental Health Outcomes

	Mean	Std. Dev
Been able to concentrate on what you're doing	2.386	.894
Lost much sleep over worry	2.373	.892
Felt you were playing a useful part in things	2.361	.911
Felt capable of making decisions about things	2.386	.887
Felt constantly under strain	2.456	.849
Felt you couldn't overcome your difficulties	2.399	.903
Been able to enjoy your normal day-to-day activities	2.443	.863
Been able to face up to your problems	2.430	.877
Been feeling unhappy and depressed	2.481	.929
Been losing confidence in yourself	2.430	.898
Been thinking of yourself as a worthless person	2.392	.858
Been feeling reasonably happy, all things considered	2.418	.897

The item means ranged from 2.361 to 2.481, while the overall mean score was 2.41. Based on the study's interpretation scale, this score falls within the moderate range, indicating the presence of noticeable psychological strain among employees. The highest mean scores were recorded for feeling unhappy and depressed (M = 2.481), feeling constantly under strain (M = 2.456), and reduced enjoyment of normal day-to-day activities (M = 2.443), indicating that emotional distress was experienced by a considerable proportion of respondents. Although the results do not indicate severe psychological impairment across the workforce, they point to mental health concerns that require attention, particularly given the safety-sensitive nature of aviation work. Standard

deviations below 1.0 across all items indicate relatively consistent responses among employees regarding their mental health experiences.

4.5 Pearson Correlation Analysis

This section presents the results of the Pearson correlation analysis conducted to determine the relationships between mental health and the study variables. The correlation coefficients and significance levels are presented in Table 4.14.

Table 4.14: Pearson Correlation Analysis

		Mental Health	Workload	Work-Life Balance	Work Environment	Role Clarity
Mental Health	r	1				
	Sig. (2-tailed)					
	N	158				
Workload	r	-.526**	1			
	Sig. (2-tailed)	.000				
	N	158	158			
Work-Life Balance	r	.439**	-.098	1		
	Sig. (2-tailed)	.000	.219			
	N	158	158	158		
Work Environment	r	.373**	.019	.075	1	
	Sig. (2-tailed)	.000	.815	.346		
	N	158	158	158	158	
Role Clarity	r	.244**	-.069	.013	-.008	1
	Sig. (2-tailed)	.002	.391	.875	.919	
	N	158	158	158	158	158

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.14 shows the Pearson correlation coefficients between mental health and the key study variables. Mental health had a moderate negative and statistically significant relationship with workload ($r = -0.526$, $p < .001$). Mental health also had a moderate positive and statistically significant relationship with work–life balance ($r = 0.439$, $p <$

.001) and work environment (r = 0.373, p < .001). In addition, mental health had a weak positive and statistically significant relationship with role clarity (r = 0.244, p = .002).

All correlation coefficients were well below the commonly accepted threshold of 0.70 that may indicate multicollinearity concerns, and none of the relationships were statistically significant. These findings indicate that the independent variables measure distinct constructs and do not exhibit substantial overlap. Consequently, each variable was considered suitable for inclusion in the regression model without posing a risk of multicollinearity that could distort parameter estimates or weaken the interpretation of the regression results.

4.6 Regression Analysis

This section presents the results of the multiple regression analysis conducted to examine the effect of workload, work–life balance, work environment, and role clarity on mental health among employees. The model summary results are presented in Table 4.15.

Table 4.15: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.772[a]	.597	.586	.53211

a. Predictors: (Constant), Role Clarity, Work Environment, Workload, Work-Life Balance

Table 4.15 shows a multiple correlation coefficient of R = 0.772. The coefficient of determination (R^2) was 0.597, indicating that 59.7% of the variation in mental health was explained by workload, work–life balance, work environment, and role clarity. The adjusted R^2 value of 0.586 indicates that the model retained substantial explanatory power after adjustment for the number of predictors included. The standard error of the estimate was 0.53211, indicating that the observed mental health scores deviated from the values

predicted by the regression model by an average of approximately 0.53 units. Given that the study variables were measured on a relatively narrow Likert-type scale, this level of prediction error is modest and indicates that the model provides a reasonably good fit to the data. The ANOVA results for the regression model are presented in Table 4.16.

Table 4.16: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64.099	4	16.025	56.596	.000[b]
	Residual	43.321	153	.283		
	Total	107.420	157			

a. Dependent Variable: Mental Health

b. Predictors: (Constant), Role Clarity, Work Environment, Workload, Work-Life Balance

Table 4.16 shows that the regression model was statistically significant, $F(4,153) = 56.596$, $p < .001$. The findings indicate that workload, work–life balance, work environment, and role clarity collectively had a statistically significant effect on mental health among employees at ALS Ltd. The regression coefficients for the predictor variables are presented in Table 4.17.

Table 4.17: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	4.733	.386		12.247	.000
	Workload	-.621	.066	-.483	-9.337	.000
	Work-Life Balance	.423	.060	.362	7.001	.000
	Work Environment	.442	.064	.356	6.910	.000
	Role Clarity	.251	.062	.209	4.055	.000

a. Dependent Variable: Mental Health

Table 4.17 shows that workload had a negative and statistically significant effect on mental health ($\beta = -0.483$, $p < .001$). Work–life balance had a positive and statistically significant effect on mental health ($\beta = 0.362$, $p < .001$). Similarly, work environment had a positive and statistically significant effect on mental health ($\beta = 0.356$, $p < .001$), while role clarity had a positive and statistically significant effect on mental health ($\beta = 0.209$, $p < .001$). All predictor variables were statistically significant at $p < .001$. Among the predictor variables, workload recorded the strongest effect on mental health, followed by work–life balance, work environment, and role clarity.

Overall, the regression results indicate that work-related stress significantly influenced mental health among employees at ALS Ltd. Workload, work–life balance, work environment, and role clarity were all significant predictors of mental health, with workload emerging as the strongest predictor.

4.7 Qualitative Findings on Factors Influencing Mental Health

This section presents the qualitative findings obtained from semi-structured interviews conducted with employees who reported high levels of work-related stress. The interviews were conducted to gain deeper insight into employees' experiences and perceptions regarding factors affecting mental health within ALS Ltd. Analysis of the interview data generated five major themes. These themes are summarized in Table 4.18.

Table 4.18: Summary of Qualitative Themes

Theme	Key Issues Identified
Workload and Time Pressure	Multiple responsibilities, strict deadlines, sustained concentrated demands
Work-Life Balance and Recovery Challenges	Irregular schedules, long shifts, inadequate recovery time, fatigue
Work Environment and Organizational Support	Supervisory support, communication challenges, access to support services
Role Clarity and Communication	Unclear expectations, operational changes, communication gaps
Perceptions of Mental Health within the Organization	Normalization of stress, stigma, help-seeking concerns, awareness needs

Table 4.18 presents the major themes that emerged from the qualitative interviews. The findings are discussed under the respective themes below.

4.7.1 Workload and Time Pressure

Participants frequently identified workload and time pressure as major sources of stress. Respondents described managing multiple responsibilities simultaneously while working under strict operational timelines. The need for sustained concentration and attention was also reported as contributing to workplace pressure.

One participant stated, *"The biggest pressure comes from having to meet strict timelines while handling multiple tasks at once. You rarely get time to breathe"* (P4, personal communication, 2026).

4.7.2 Work-Life Balance and Recovery Challenges

Work–life balance emerged as another important theme. Participants frequently discussed irregular work schedules, long shifts, and limited recovery periods between duties. These conditions were reported to interfere with sleep patterns, family responsibilities, and personal well-being.

As one respondent noted, *"Sometimes you finish a long shift, and before you fully recover, you are back on duty again. It becomes exhausting over time"* (P9, personal communication, 2026).

Several participants expressed concerns regarding irregular schedules and limited recovery periods between duties.

4.7.3 Work Environment and Organizational Support

The work environment was also identified as a significant influence on employees' mental health. Participants highlighted the importance of supportive leadership, effective communication, and access to organizational support systems. Some respondents reported that limited supervisory support and inadequate communication during operational changes contributed to workplace stress.

Participants also emphasized the need for accessible mental health support services within the organization. Suggested interventions included counseling services, peer support systems, and confidential channels for discussing workplace concerns.

As one participant explained, *"It would help if there was a safe space to talk about stress without fear of judgment or consequences at work"* (Participant 2, personal communication, 2026).

4.7.4 Role Clarity and Communication

Role clarity emerged as another factor influencing employees' experiences of stress. Some participants reported unclear task expectations, changing operational requirements, and communication gaps in the workplace. Participants frequently mentioned communication challenges relating to responsibilities and operational changes.

4.7.5 Perceptions of Mental Health within the Organization

Participants reflected on broader attitudes toward mental health within the aviation work environment. Several respondents expressed concern that stress is often viewed as a normal part of aviation work, discouraging employees from discussing mental health challenges or seeking support.

One participant stated, *"People just assume stress is part of the job, so many keep quiet even when it becomes too much"* (Participant 7, personal communication, 2026).

They also noted that mental strain could affect concentration, decision-making, and overall work performance, highlighting the importance of addressing mental health concerns within safety-sensitive work environments.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the key findings of the study, followed by conclusions and recommendations based on the results. The chapter draws from the quantitative and qualitative findings of the study to discuss how workload, work–life balance, work environment, and job demands influence the mental health of aviation professionals at Aircraft Leasing Services Limited (ALS Ltd.). The aim is to synthesize the main results in a clear manner and provide a basis for practical and policy-oriented recommendations. The chapter also interprets the findings in relation to the study objectives, theoretical frameworks, and existing empirical literature, with the aim of explaining the effect of work-related stress on mental health among aviation professionals at ALS Ltd.

5.2 Discussions

5.2.1 Demographic Characteristics and Mental Health Status

The findings show that mild psychological distress was common among both male and female respondents, with only small descriptive differences between the two groups. This pattern is consistent with workplace mental health literature showing that psychological distress in high-demand occupations is often linked more strongly to work conditions, workload, support systems, and organizational climate than to gender alone. Sarkar et al. (2024) note that workplace mental health is influenced by psychosocial risks such as excessive demands, poor support, and weak psychological safety, while Zhong et al. (2022) confirmed the usefulness of GHQ-12 in detecting mental health strain among

workers exposed to demanding occupational conditions. Although the Chi-square result was statistically significant, the finding should be interpreted cautiously because several expected cell counts were below five, meaning the statistical association may be unstable.

Mild psychological distress was predominant across all age groups, and the non-significant Chi-square result indicates that mental health status did not differ meaningfully by age in this sample. This aligns with occupational stress literature showing that psychological distress may cut across age groups when employees share similar organizational demands, especially in high-responsibility work settings. Zhong et al. (2022) used the GHQ-12 among healthcare workers and showed that mental health screening is useful across demographic groups, while Sarkar et al. (2024) emphasize that workplace mental health risks often arise from exposure to psychosocial work conditions rather than age alone. The low number of moderate distress cases also means that age-based differences should not be overinterpreted.

Mild psychological distress was reported across all job roles, with Flight Operations Officers/Dispatchers and Flight Attendants/Cabin Crew recording the highest proportions. This pattern is plausible because aviation occupations, regardless of role, are characterized by common psychosocial demands such as sustained vigilance, operational time pressure, regulatory compliance, teamwork, and responsibility for safety. The absence of a statistically significant association indicates that mental health status was not strongly differentiated by occupational role in this sample, suggesting that exposure to work-related stress at ALS Ltd. may be organization-wide rather than confined to specific job categories. This finding is consistent with occupational mental health research showing that psychological distress is primarily influenced by psychosocial work characteristics,

including high job demands, low job control, and inadequate organizational support, rather than occupational title alone (Sarkar et al., 2024; Harvey et al., 2017). Similarly, Zhong et al. (2022) demonstrated that the GHQ-12 is an effective instrument for identifying psychological distress among workers exposed to demanding occupational environments, supporting its application in assessing mental health across diverse aviation job roles.

Employees with less than one year of service had the lowest proportion of good mental health and the highest proportion of moderate psychological distress, while those with longer tenure generally showed better mental health profiles. Although the overall Chi-square result was not statistically significant, the significant linear-by-linear association points to a possible tenure-related pattern. This may indicate that newer employees experience adjustment pressure, uncertainty, and role adaptation challenges, while longer-serving employees may develop coping strategies and better familiarity with organizational systems. This interpretation is consistent with role and workplace stress literature, which links uncertainty, job insecurity, and limited work adjustment to poorer mental health outcomes. Rönnblad et al. (2019) found that job insecurity and precarious work conditions are associated with poorer mental health, while Sarkar et al. (2024) note that organizational support and psychologically safe work systems are important for protecting employee well-being.

Mental health status was broadly similar across full-time, part-time, and contract employees, and the Chi-square result showed no significant association between employment type and mental health. This indicates that employment arrangement alone did not explain differences in mental health status among ALS Ltd. employees. However, the slightly higher proportion of moderate distress among contract employees may still be

relevant, given evidence that insecure or non-standard employment can affect psychological well-being. Rönnblad et al. (2019) found that precarious employment, particularly job insecurity, is associated with adverse mental health outcomes, while Jiang et al. (2022) showed that job insecurity can influence workplace behavior and employee responses. In the present study, the non-significant result may be due to the small number of part-time and contract respondents.

Mild psychological distress was most common among employees working rotating or irregular shifts, while those on regular daytime schedules recorded the highest proportion of good mental health. Although the Chi-square test did not indicate a statistically significant association between work schedule and mental health status, the descriptive pattern is consistent with evidence that irregular and rotating work schedules disrupt circadian rhythms, impair sleep quality, reduce recovery time, and increase fatigue, thereby elevating the risk of psychological distress. A systematic review by Åkerstedt and Kecklund (2017) found that shift work is consistently associated with sleep disturbances, fatigue, and adverse health outcomes, while a meta-analysis by Ravindra Jayawardena and colleagues reported that irregular shift schedules contribute to physiological and psychological strain through circadian disruption. Similarly, Sarkar et al. (2024) emphasize that adequate recovery time, supportive work organization, and effective workload management are essential protective factors for maintaining employees' mental health. The lack of statistical significance in the present study may therefore reflect the relatively small subgroup sizes rather than the absence of a meaningful relationship between work schedules and psychological well-being.

5.2.2 Workload-Related Stress and Mental Health among Employees

The first objective of the study was to determine the effect of workload-related stress on mental health among employees at ALS Ltd., Nairobi, Kenya. The findings demonstrated that workload-related stress had a significant negative effect on employees' mental health, indicating that increasing workload pressures were associated with poorer psychological well-being. Workload was found to have a negative and statistically significant effect on mental health ($\beta = -0.483$, $p < .001$). This indicates that higher workload is associated with poorer mental health outcomes and represents the strongest predictor in the model. The magnitude of the coefficient indicates that workload is the most influential predictor in the model, which points to its dominant role in shaping employees' psychological outcomes. In practical terms, this finding indicates that demands such as tight deadlines, long working hours, task overload, and sustained operational pressure are likely exceeding employees' coping capacity, leading to strain, fatigue, and reduced emotional stability. In an aviation setting where attention, precision, and continuous alertness are required, such pressure can accumulate and affect both individual functioning and job performance.

The descriptive findings provide additional support for this relationship. Employees reported moderate but recurring workload pressures, with mean scores across most workload indicators approaching 3.0. Respondents indicated that they were often required to work very fast to meet operational demands ($M = 3.0443$), experienced unrealistic time pressure ($M = 3.0316$), and frequently worked under tight deadlines ($M = 3.0063$). Employees also reported limited opportunities to take breaks and occasional difficulty completing all assigned tasks within available time. These findings suggest that workload pressures were a common experience among employees and were not confined to a small

segment of the workforce. The qualitative findings reinforced this pattern, with participants describing multiple simultaneous responsibilities, strict operational timelines, and sustained concentration demands. One participant explained that “the biggest pressure comes from having to meet strict timelines while handling multiple tasks at once,” highlighting the intensity of workload demands within the aviation environment.

The finding is consistent with the empirical literature reviewed in the study, which consistently links excessive workload with adverse psychological outcomes in safety-sensitive occupations. Masi (2023) reported that extended working hours among civil and military pilots in the United States and Europe led to cognitive deterioration, emotional fatigue, and reduced situational awareness. Similarly, Zhou et al. (2024) found that sustained time pressure among air traffic controllers in China was associated with anxiety, sleep disturbance, and absenteeism. The same finding is reported in broader occupational research, where Kelloway et al. (2023) documented consistent associations between high workload and burnout, depressive symptoms, and psychosomatic complaints across multiple sectors.

Studies from Europe further support this relationship, with Taylor and Thomas (2020) showing that prolonged duty hours and insufficient rest among flight crews resulted in chronic exhaustion and emotional detachment, while Parker et al. (2020) reported that stigma and regulatory concerns may prevent pilots from disclosing mental health challenges, which allows workload-related stress to persist and affect performance. Evidence from Asia also aligns with the present findings, where Safitri et al. (2025) found that high workload among Indonesian aviation personnel reduced mood and productivity,

and Tan et al. (2022) linked rotating shifts among Singaporean maintenance engineers with sleep difficulties and emotional exhaustion.

Although aviation-focused studies in Africa are limited, related studies from safety-sensitive sectors supports the same conclusion, with Habtu et al. (2025) reporting anxiety and emotional exhaustion among Ethiopian healthcare workers exposed to heavy workload, and Nkosi and Pillay (2023) identifying similar outcomes among transportation personnel in South Africa. Kenyan studies show comparable trends, where Mutua and Njoroge (2022) linked extended shifts and heavy workload with reduced psychological well-being, and Mwangi (2023) reported chronic fatigue among airport ground-handling staff. In this context, the result confirms that workload operates as a key stressor within aviation settings in Kenya, with direct implications for employee mental health, operational safety, and sustained performance.

The findings are also consistent with Lazarus and Folkman's (1984) Transactional Model of Stress and Coping, which posits that stress occurs when individuals perceive environmental demands as exceeding their available coping resources. In the present study, workload pressures appear to have exceeded employees perceived coping capacity, resulting in psychological strain. The findings further support the Job Demand–Resources (JD-R) Model (Demerouti et al., 2001), which identifies excessive workload as a job demand capable of depleting employee energy and contributing to adverse mental health outcomes when not balanced by adequate organizational resources.

5.2.3 Work-life Balance-Related Stress and Mental Health among Employees

The second objective of the study was to establish the association between work-life balance-related stress and mental health among employees at ALS Ltd., Nairobi, Kenya.

The findings revealed that work–life balance had a significant positive association with employees' mental health, indicating that employees who experienced a healthier balance between their work responsibilities and personal lives reported better psychological well-being. Work–life balance was found to have a positive and significant effect ($\beta = 0.362$, $p < .001$), which indicates that better balance between work and personal life is associated with improved mental health. The magnitude of the coefficient shows that work–life balance is a strong predictor, second only to workload, which means that conditions that allow employees adequate time for rest, family engagement, and personal activities are linked with reduced strain, better emotional stability, and improved overall mental functioning. In practical terms, this result indicates that when aviation professionals are able to detach from work, recover between duty periods, and maintain meaningful social and family connections, their mental health improves. It also implies that constraints such as long hours, irregular schedules, and limited recovery time are likely to disrupt this balance and contribute to stress when not properly managed.

The descriptive findings revealed moderate levels of work–life balance strain among employees. Respondents reported that work frequently interfered with home responsibilities ($M = 2.9557$), limited opportunities for rest and recovery ($M = 2.9873$), and affected their ability to maintain personal commitments. The highest mean score was recorded for the statement that work takes up so much time that employees cannot engage in activities they enjoy ($M = 3.0190$). These findings suggest that employees experience ongoing tension between professional obligations and personal life demands. The qualitative findings further illustrated this challenge, with participants describing irregular schedules, long shifts, and inadequate recovery periods between duties. One participant

noted that returning to duty before fully recovering from a previous shift became exhausting over time.

Similarly, studies show that employees in high-demand roles who struggle with balancing responsibilities report higher levels of stress and reduced well-being (Sharma & Cooper, 2023). Kelloway et al. (2023) found that limited rest and reduced social engagement contribute to emotional exhaustion and lower resilience. Evidence from Europe shows that irregular schedules and excessive overtime increase psychological distress among shift workers (Eurofound, 2022), and Taylor and Thomas (2020) reported that long-haul flight crews experience fatigue and strained relationships due to prolonged absences and insufficient rest.

Similar findings have been reported in Asia and North America, where Lee et al. (2024) linked rotating shifts with emotional exhaustion among flight crews, Safitri et al. (2025) associated irregular schedules with family conflict and poor health outcomes, and Parker et al. (2020) observed that pilots who protected personal time and engaged in peer support were less likely to experience burnout. Organizational practices also play a role, as Biron and van Veldhoven (2022) and Ballard et al. (2025) reported improved mental health where flexible scheduling and supportive leadership were present.

Studies from African contexts agree with these findings, with Adebayo et al. (2022) reporting high stress and family strain among Nigerian aviation personnel with irregular schedules, and Nkosi and Pillay (2023) linking inflexible work arrangements with adverse health outcomes in South Africa. Kenyan studies report similar outcomes, where Omondi and Wachira (2023) associated limited family time with low mood and reduced motivation, and Mutua and Njoroge (2022) linked work–life conflict with burnout among

transportation workers. In this context, the finding confirms that work–life balance is a key protective factor for mental health, with better balance linked to improved well-being among aviation professionals in Nairobi.

These findings are also supported by the Transactional Model of Stress and Coping, which emphasizes the importance of personal and social resources in managing stress. When work interferes with recovery, family engagement, and personal well-being, employees may have fewer resources available to cope effectively with workplace demands. Similarly, the JD-R Model suggests that opportunities for rest, recovery, and social support act as important resources that protect employees from the negative effects of demanding work schedules.

5.2.4 Work Environment-Related Stress and Mental Health among Employees

The third objective of the study was to investigate the effect of the work environment-related stress on employees' mental health at ALS Ltd., Nairobi, Kenya. The findings demonstrated that work environment-related stressors significantly influenced employees' mental health, with supportive workplace conditions contributing positively to psychological well-being. Work environment was also found to have a positive and significant effect ($\beta = 0.356$, $p < .001$), which indicates that supportive and healthy workplace conditions contribute to better mental health. The size of the coefficient shows that work environment is a strong predictor of mental health, which means that factors such as supportive supervision, respectful colleague relationships, clear communication, and a psychologically safe climate contribute meaningfully to reduced stress and improved emotional stability. In practical terms, this result indicates that when employees feel supported, listened to, and treated fairly within their work setting, they are more likely to

cope effectively with job demands and maintain better mental health. Conversely, environments characterized by poor communication, strained relationships, or lack of managerial support are likely to increase psychological strain and reduce well-being.

The descriptive findings revealed a mixed perception of workplace conditions among employees. Positive experiences included receiving supportive feedback and being treated with respect by colleagues. However, lower scores were recorded for reliance on supervisors during challenging situations and receiving support when work became emotionally demanding. Respondents also reported experiences of strained workplace relationships, exposure to unkind behaviour, and awareness of workplace bullying. These findings suggest that although supportive workplace elements existed, psychosocial stressors remained present within the organizational environment. The qualitative findings further reinforced these observations, with participants highlighting communication challenges, gaps in supervisory support, and the need for accessible mental health support services.

The finding agrees with Kelloway et al. (2023) who show that psychologically safe work environments characterized by supportive leadership and clear communication are associated with reduced stress and improved mental health in safety-critical occupations. Similarly, Schaufeli and Bakker (2022) found that supportive organizational climates are linked with lower stress and higher engagement. Aviation-specific studies report similar patterns, where Taylor and Thomas (2020) found that unsupportive cockpit and cabin environments were associated with anxiety and mental fatigue, while collaborative environments improved resilience. Zhou et al. (2024) also reported that lack of managerial support among air traffic controllers in China was associated with anxiety and sleep

disturbances, while Ballard et al. (2025) found that leadership development and participatory well-being initiatives improved morale and reduced burnout.

The finding is further supported by research from Asia and Europe, where Tan et al. (2022) found that excessive supervision and limited autonomy among aviation maintenance personnel were linked with anxiety and poor performance, while supportive leadership improved coping and satisfaction, and Biron and van Veldhoven (2022) reported that improved supervisory support and work conditions were associated with better mental health outcomes. In North America, Parker et al. (2020) found that unsupportive management cultures in aviation discouraged disclosure of psychological difficulties and contributed to burnout.

Similarly, the finding is in tandem with African studies, where Habtu et al. (2025) reported that lack of supervisory support and workplace conflict contributed to depression among Ethiopian healthcare workers, Adebayo et al. (2022) found that poor communication and rigid supervision among Nigerian aviation personnel led to emotional exhaustion, and Nkosi and Pillay (2023) linked toxic workplace environments in South Africa with burnout. Kenyan studies cited in the literature also align with the present finding, where Mwangi (2023) reported that poor supervision and unclear roles contributed to anxiety and fatigue among ground-handling staff, and Mutua and Njoroge (2022) found that strained supervisory relationships and poor communication were associated with deteriorating mental health among transport workers. In this context, the ALS Ltd. result confirms that a supportive and well-structured work environment acts as a protective factor for mental health among aviation professionals in Nairobi.

The findings strongly support Kelloway, Dimoff, and Gilbert's (2023) Workplace Mental Health and Well-Being Framework, which emphasizes that supportive leadership, effective communication, and psychologically safe work environments are essential for promoting employee well-being. Participants' recommendations for counselling services, peer support systems, and safe spaces for discussing stress further reinforce the importance of organizational support systems in maintaining positive mental health outcomes.

5.2.5 Job Demand-Related Stress and Mental Health among Employees

The fourth study objective was to analyze the association between job demand-related stress and mental health outcomes among employees at ALS Ltd., Nairobi, Kenya. The findings revealed that job demand-related stress had a significant association with employees' mental health. Job demand within this study was assessed through indicators such as role clarity, conflicting work demands, employee involvement in workplace changes, communication regarding organizational changes, and opportunities to engage with management. Job demand was found to have a positive and statistically significant effect ($\beta = 0.209$, $p < .001$), which indicates that clear expectations and understanding of job roles still play an important role in supporting employee well-being. Although the magnitude of the effect is smaller compared to other predictors, it remains meaningful, which shows that clarity in job roles functions as a supportive condition that helps employees manage job demands more effectively. In practical terms, this result indicates that when employees understand what is expected of them, how to carry out their duties, and how changes in work processes are implemented, they experience less confusion, reduced cognitive strain, and improved confidence in task execution. In contrast,

ambiguity, conflicting expectations, and poor communication about roles can increase stress and contribute to emotional fatigue.

The descriptive findings revealed moderate levels of job demand-related experiences among employees. Respondents generally reported understanding how to perform their duties and how workplace changes would affect their work. However, they also reported conflicting demands from different groups, limited consultation during workplace changes, and only moderate clarity regarding organizational expectations. The qualitative findings similarly identified unclear expectations, changing operational requirements, and communication gaps as sources of workplace uncertainty. These findings suggest that while employees generally demonstrated adequate role clarity, competing demands and communication gaps surrounding organizational changes remained important job demand factors influencing mental health.

The finding is consistent with Parker et al. (2020) whose study shows that high job demands such as continuous monitoring and extended duty cycles are associated with fatigue, anxiety, and reduced attentional control. Similarly, Taylor and Thomas (2020) found that cumulative duty hours and emotional regulation requirements contribute to burnout and depressive symptoms. At the same time, research shows that clarity and structure in task execution can buffer these effects. Zhou et al. (2024) found that while high attentional demands among air traffic controllers increased strain, autonomy and structured support reduced negative outcomes, and Ballard et al. (2025) reported that clear task communication and collaborative workload distribution reduced emotional exhaustion across aviation-related industries.

Similar findings have been reported in Asia and Europe, where Lee et al. (2024) found that time pressure increased emotional strain but autonomy and recognition improved coping, and Tan et al. (2022) showed that lack of control and high task density increased exhaustion among aviation engineers. Broader occupational evidence also aligns with this pattern, where Kelloway et al. (2023) found that unclear demands and constant multitasking increased anxiety, while supportive leadership reduced distress, and Biron and van Veldhoven (2022) reported that structured task management and supervisory support improved resilience.

Studies from African contexts show similar dynamics, where Habtu et al. (2025) linked high administrative demands with emotional exhaustion among Ethiopian healthcare workers, and Nkosi and Pillay (2023) found that tight deadlines increased burnout among logistics personnel, although participative management reduced these effects. Kenyan studies cited in the literature also support this interpretation, where Mutua and Njoroge (2022) reported that high demands and limited rest led to burnout among transport workers, and Mwangi (2023) found that continuous monitoring and strict operational targets contributed to emotional exhaustion among airport ground-handling staff. In this context, the finding indicates that while job demands remain high in aviation settings, clarity in roles and expectations helps reduce uncertainty and supports better mental health among employees.

These findings are consistent with the Job Demand–Resources Model, which identifies role ambiguity and conflicting demands as job demands that increase psychological strain, while role clarity and effective communication function as resources that reduce uncertainty and support employee well-being. The findings also align with the

Transactional Model of Stress and Coping, which suggests that employees are more likely to experience stress when workplace demands are perceived as exceeding available coping resources. When job demands are accompanied by uncertainty, conflicting expectations, or inadequate communication, employees may experience increased psychological strain and reduced well-being.

5.2.6 Mental Health Status among Employees

The study assessed mental health using the General Health Questionnaire (GHQ-12). The findings indicated moderate levels of psychological strain among employees at ALS Ltd., with mean scores ranging from 2.361 to 2.481 across the twelve indicators. The highest mean scores were recorded for feeling unhappy and depressed, feeling constantly under strain, and reduced enjoyment of normal day-to-day activities. Respondents also reported challenges related to concentration, confidence, and decision-making, although severe psychological impairment was not dominant across the sample. These findings suggest that while employees generally remained functional in carrying out their work responsibilities, many were experiencing persistent emotional and psychological strain that may negatively affect their well-being if left unaddressed.

These findings suggest that employees were experiencing noticeable levels of emotional and psychological strain despite maintaining relatively functional levels of daily performance. The results are consistent with occupational mental health research indicating that moderate psychological distress is common among employees working in high-demand and safety-sensitive environments. Lundin et al. (2021) and Hinz et al. (2022) reported that symptoms such as stress, low mood, fatigue, and reduced enjoyment of daily activities are frequently observed among workers exposed to sustained occupational

demands. Goldberg et al. (2021) further argued that early manifestations of psychological distress identified through the GHQ-12 provide important indicators of potential mental health risks and opportunities for early intervention.

The findings are also consistent with the quantitative results of this study, which showed that workload was negatively associated with mental health, while work–life balance, work environment, and job demand-related resources such as role clarity were positively associated with mental health outcomes. The moderate levels of strain identified through the GHQ-12 therefore appear to reflect the cumulative influence of workplace stressors experienced by employees at ALS Ltd. This suggests that although employees continue to perform their duties effectively, ongoing exposure to workload pressures, irregular schedules, workplace challenges, and competing job demands may gradually erode psychological well-being over time.

The findings are also consistent with Kelloway, Dimoff, and Gilbert's (2023) Workplace Mental Health and Well-Being Framework, which emphasizes the importance of identifying and addressing early indicators of psychological strain within organizations. The presence of moderate distress among employees suggests a need for proactive organizational measures aimed at promoting psychological well-being and preventing the progression of work-related mental health challenges. This is particularly important within the aviation industry, where employee mental health is closely linked to concentration, decision-making, safety performance, and operational effectiveness. Early identification and management of psychological strain may therefore benefit both employee well-being and organizational safety outcomes.

5.3 Summary of Main Findings

The study sought to determine the effect of workload-related stress on mental health among employees at ALS Ltd., Nairobi, Kenya. The study established that workload-related stress is a common experience among employees, with mean scores across all indicators close to 3.0, which indicates moderate but recurring pressure. Employees reported working under tight deadlines, high speed demands, and persistent time pressure, alongside limited opportunities for rest and task completion. This shows that workload often exceeds available time and recovery capacity, which places employees under sustained operational strain. Regression analysis further established that workload had a negative and statistically significant effect on mental health ($\beta = -0.483$, $p < .001$), indicating that increased workload is associated with poorer mental health outcomes. Workload emerged as the strongest predictor of mental health among all study variables.

The study also set out to establish the association between work-life balance-related stress and mental health among employees at ALS Ltd., Nairobi, Kenya. The findings on work–life balance indicate a slightly strained balance between professional and personal responsibilities. Mean scores across all items were within the average, with employees reporting interference of work with home responsibilities, limited time for rest, and difficulty maintaining personal life commitments. Time pressure emerged as a key concern, with many respondents indicating that work occupies a large portion of their time and affects family and social relationships. The study further established that work–life balance had a positive and statistically significant effect on mental health ($\beta = 0.362$, $p < .001$), indicating that employees who experience better balance between work and personal life are more likely to report better mental health outcomes.

The study further investigated the effect of the work environment-related stressors on employees at ALS Ltd., Nairobi, Kenya. Work environment results indicate a mixed experience among employees. While there are positive elements such as respectful interactions and supportive feedback, there are also notable gaps in supervisory support and emotional assistance during demanding tasks. At the same time, some employees reported strained relationships, exposure to unkind behavior, and awareness of workplace bullying. Confidence in reporting mechanisms was moderate, which indicates partial trust in organizational response systems. The study established that work environment had a positive and statistically significant effect on mental health ($\beta = 0.356$, $p < .001$), indicating that supportive workplace conditions contribute to improved employee psychological well-being.

The study further analyzed the association between job demand-related stress and mental health outcomes among employees at ALS Ltd., Nairobi, Kenya. Job demand-related findings show that employees experience moderate levels of role-related pressure. Most respondents indicated a basic understanding of their tasks and how to perform them, although gaps exist in communication, consultation, and clarity during workplace changes. The presence of conflicting demands and moderate levels of autonomy indicate that employees must navigate competing expectations, which increases cognitive load and work-related strain. The study further established that role clarity, as an indicator of job demand management, had a positive and statistically significant effect on mental health ($\beta = 0.209$, $p < .001$), indicating that clear expectations and effective communication regarding job roles support better mental health outcomes among employees.

Mental health outcomes measured using the GHQ-12 indicate moderate psychological strain among employees at ALS Ltd., Nairobi, Kenya. Respondents reported experiences of stress, low mood, and reduced enjoyment of daily activities, alongside some impact on concentration, decision-making, and confidence. At the same time, severe psychological distress was not widespread, which indicates that while strain is present, it has not reached extreme levels across the workforce.

Regression analysis showed that all four predictors significantly influenced mental health among employees at ALS Ltd., Nairobi, Kenya. Workload had a negative and statistically significant effect ($\beta = -0.483$, $p < .001$), indicating that higher workload is associated with poorer mental health outcomes and representing the strongest predictor in the model. Work–life balance had a positive and significant effect ($\beta = 0.362$, $p < .001$), indicating that better balance between work and personal life is associated with improved mental health. Work environment also had a positive and significant effect ($\beta = 0.356$, $p < .001$), indicating that supportive and healthy workplace conditions contribute to better mental health. Role clarity had a positive and significant effect ($\beta = 0.209$, $p < .001$), indicating that clear expectations and understanding of job roles support employee well-being. Overall, the findings demonstrate that workload functions as the primary risk factor for poor mental health, while work–life balance, supportive work environments, and role clarity serve as protective factors that enhance psychological well-being among aviation professionals at ALS Ltd.

5.4 Conclusions

Workload emerged as the strongest factor associated with mental health among employees at ALS Ltd. Higher levels of workload, characterized by time pressure, long

working hours, and intensive task requirements, were associated with poorer mental health outcomes. Employees who experience persistent pressure with limited opportunities for rest and recovery are more likely to report psychological strain, fatigue, and reduced emotional well-being. Given the safety-sensitive nature of aviation operations, managing workload remains important for both employee welfare and operational effectiveness.

Work–life balance was positively associated with mental health. Employees who were able to maintain a reasonable balance between work responsibilities and personal life reported better psychological well-being. Adequate time for rest, family responsibilities, and personal activities appears to support emotional stability and reduce the adverse effects associated with demanding work schedules. Disruptions in this balance may increase stress levels and negatively affect employees' quality of life.

The findings also indicate that workplace conditions play an important role in employee well-being. Supportive supervision, respectful workplace relationships, effective communication, and a positive organizational climate were associated with better mental health outcomes. Conversely, deficiencies in workplace support and negative interpersonal experiences may increase employees' susceptibility to psychological distress. These findings emphasize the importance of fostering a healthy psychosocial work environment within aviation organizations.

Role clarity was positively associated with mental health, although its contribution was smaller than those of workload, work-life balance, and work environment. Employees who clearly understood their responsibilities, expectations, and reporting structures reported better psychological well-being than those experiencing uncertainty regarding their roles. Clear communication, well-defined responsibilities, and opportunities for

engagement with management may reduce confusion and help employees navigate workplace demands more effectively. Collectively, the findings indicate that mental health among aviation professionals is associated with both workplace pressures and the availability of supportive organizational conditions.

5.5 Recommendations

The study recommends that aviation companies in Kenya prioritize workload management as a key intervention area for improving employee mental health. This can be achieved through better task allocation, adequate staffing, and realistic scheduling that aligns duties with human capacity. Operational plans should incorporate mandatory rest periods and enforce limits on extended working hours to reduce fatigue and prevent cumulative strain. Monitoring systems can also be introduced to track workload intensity and identify periods of excessive demand, allowing timely adjustments that protect both employee well-being and operational performance. Additionally, organizations should regularly review staffing levels and workload distribution across departments to ensure that employees are not consistently exposed to excessive work demands.

The study also recommends that aviation companies in Kenya strengthen work–life balance through organizational policies that support recovery and personal time. Flexible scheduling where feasible, predictable duty rosters, and structured leave arrangements can help employees manage personal and family responsibilities alongside work demands. Management should encourage a culture that respects time off and discourages unnecessary work encroachment into personal time. Employee support initiatives such as wellness programs, stress management training, peer-support programs, and confidential counselling services can further assist staff in managing stress and maintaining

psychological well-being. Organizations should also consider implementing family-friendly workplace policies that support employees in balancing work and personal commitments.

Improving the work environment is another key recommendation. Aviation companies in Kenya should invest in leadership development programs that promote supportive supervision, effective communication, and respectful workplace interactions. Managers and supervisors should be trained to recognize early signs of psychological distress and respond appropriately through supportive interventions and referrals. Mechanisms for reporting and addressing workplace concerns, including harassment, bullying, and interpersonal conflict, should be strengthened to ensure trust and accountability. Creating a psychologically safe environment where employees feel valued, respected, and heard can enhance morale, reduce stress, and improve overall mental health outcomes.

The study also recommends enhancing role clarity and communication within aviation companies in Kenya. Clear job descriptions, regular briefings, and transparent communication about operational changes can reduce uncertainty and help employees perform their duties with confidence. Involving employees in decision-making processes and providing opportunities for feedback can improve understanding and ownership of tasks. Organizations should establish regular communication channels through departmental meetings, operational updates, and feedback forums to ensure employees remain informed about expectations and workplace changes. These measures can reduce confusion, minimize conflicting demands, and support employees in managing job pressures more effectively within the aviation work environment.

The study further recommends that aviation industry regulators and policy makers, including the Kenya Civil Aviation Authority (KCAA) and relevant labour and occupational health agencies, incorporate employee mental health considerations into aviation safety and occupational health policies. Mental health screening, employee assistance programs, fatigue management systems, and workplace well-being initiatives should be integrated into industry guidelines to promote both employee welfare and operational safety.

Finally, future researchers should conduct similar studies across multiple aviation organizations in Kenya and other African countries to improve the generalizability of findings. Longitudinal studies are also recommended to examine how work-related stress and mental health outcomes evolve over time. Further research may explore additional factors such as organizational culture, leadership style, resilience, coping strategies, and social support to provide a broader understanding of employee mental health within the aviation sector.

5.6 Areas of Further Research

Future studies should examine work-related stress and mental health in larger aviation organizations within Kenya, such as commercial airlines, airport service providers, and aviation regulatory agencies, to determine whether the relationships observed at ALS Ltd. are consistent across different operational settings. Comparative studies involving organizations with varying structures, workforce sizes, and operational demands would provide a broader understanding of mental health challenges.

Longitudinal research is also recommended to examine how work-related stress and mental health outcomes evolve over time. Such studies would provide a clearer

understanding of the direction and persistence of the relationships observed in the present study. Larger qualitative investigations involving a wider representation of occupational groups may also provide deeper insight into staff experiences, and workplace challenges.

Further research should explore additional factors that may influence mental health, including organizational support, leadership style, resilience, job satisfaction, and access to mental health services. Intervention-based studies evaluating the effectiveness of workload management initiatives, flexible scheduling arrangements, employee assistance programs, and workplace mental health interventions would also provide valuable evidence for improving employee well-being within aviation organizations.

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APPENDICES

Appendix 1: Consent Form

Title of Study: Effect of work-related stress on mental health among aviation professionals in Kenya: A case of Aircraft Leasing Services (ALS) Ltd.

Principal Investigator:

Sonia Atak Omondi

Master of Arts in Counselling Psychology

Africa Nazarene University

Email: 24s01dmcp001@anu.ac.ke

Phone: +254780407268

Purpose of the Study

You are invited to participate in a research study that aims to examine the relationships between work-related stressors on mental health among aviation professionals at ALS Ltd. The findings of this study will contribute to understanding workplace stressors, psychological well-being, and potential interventions that may support employee mental health in aviation work settings.

Procedures

If you agree to participate, you will be asked to complete a structured questionnaire. This questionnaire will collect information about your work-related stress, coping mechanisms, work environment factors, and your psychological well-being. Completing the questionnaire will take approximately 15–20 minutes. No direct physical or emotional risk

is anticipated; however, some questions may cause mild emotional discomfort as they relate to work stress and mental health.

Voluntary Participation

Your participation in this study is entirely voluntary. You are not required to take part if you are not willing. You may choose not to answer any question that makes you uncomfortable, and you may withdraw from the study at any point without providing a reason and without facing any penalty, disadvantage, or loss of benefits to which you are otherwise entitled. Only individuals who provide formal written consent will be included in the study.

Potential Risks

There are minimal risks associated with participating in this study. Some questions may cause emotional discomfort due to their focus on stress and mental health. If you experience any distress at any point, you may pause or discontinue the questionnaire.

Potential Benefits

Although there may be no direct benefit to you individually, your participation will contribute to a greater understanding of work-related stress in the aviation sector. The findings may help organizations design more effective wellness programs, strengthen support structures, and enhance mental health interventions for aviation professionals.

Confidentiality and Data Protection

All information you provide will be kept strictly confidential. Your responses will be coded and analyzed without identifying you personally. Data will be stored securely and accessed

only by the researcher and academic supervisors. No names or personal identifiers will be included in the final report. All results will be reported in aggregated form.

Right to Withdraw

You may withdraw from the study at any time, even after signing this form, without facing any consequences. If you decide to withdraw after completing the questionnaire, your data will not be used in the analysis and will be securely discarded.

Ethical Approval

This research has been reviewed and approved by the National Commission for Science, Technology, and Innovation (NACOSTI), Kenya, and the ethical review board of Africa Nazarene University. All procedures comply with ethical standards for human participants in research.

Contact Information

If you have any questions, concerns, or complaints about this study, please contact:

Principal Investigator: Sonia Atak Omondi (24s01dmcp001@anu.ac.ke)

CONSENT STATEMENT

Please read the statement below and indicate your agreement:

I have read and understood the information provided in this consent form. I understand the purpose, procedures, risks, and benefits of this study. I understand that my participation is voluntary and that I may withdraw at any time without penalty. I voluntarily agree to participate in this study.

Participant's Signature: _____

Date: _____

Researcher's Declaration

I confirm that I have explained the purpose and procedures of the study to the participant clearly and understandably. I have answered all questions, and I believe the participant has freely consented to take part in the study.

Researcher's Name: _____

Signature: _____

Date: _____

Appendix 2: ALS Data Research Authorization Request

The Chief Executive Officer

Aircraft Leasing Services (ALS) Limited

P.O. Box 41937-00100

Nairobi, Kenya

Email: hr@als.co.ke

Dear Sir/Madam,

RE: REQUEST FOR AUTHORIZATION TO CONDUCT RESEARCH AT AIRCRAFT LEASING SERVICES (ALS) LTD

I am writing to formally request permission to conduct academic research within your esteemed organization, Aircraft Leasing Services (ALS) Ltd. I am a postgraduate student pursuing a Master of Arts in Counselling Psychology at Africa Nazarene University, and I am currently undertaking a research study titled:

"Effect of work-related stress on mental health among aviation professionals: A Case of Aircraft Leasing Services (ALS) Ltd."

The purpose of this study is to assess patterns of work-related stress, contributing factors, and their influence on the mental health and psychological well-being of aviation personnel. ALS Ltd was selected purposively due to its significant role in Kenya's aviation sector, diversity of professional roles (pilots, engineers, flight crew, operations, and administration), and its reputation for operational excellence.

Objectives of the Study

i. To determine the effect of workload on mental health among employees at ALS Ltd., Nairobi, Kenya.

ii. To establish the association between work–life balance and mental health among employees at ALS Ltd., Nairobi, Kenya.

iii. To investigate the effect of the work environment on employees' mental health at ALS Ltd., Nairobi, Kenya.

iv. To analyze the association between job demand and mental health outcomes among employees at ALS Ltd., Nairobi, Kenya.

Data Collection Approach

If granted authorization, the research will involve the administration of structured questionnaires to sampled ALS employees. No personal identifiers will be collected, and all responses will be strictly confidential. The study will not disrupt normal operations, and participation will be voluntary, anonymous, and non-invasive.

Data collection will strictly adhere to guidelines from:

- NACOSTI (National Commission for Science, Technology and Innovation)
- Africa Nazarene University Ethical Review Board
- APA Ethical Standards (2017)

A NACOSTI research permit, institutional ethical approval letter, and consent forms will be provided before commencement of the study.

Confidentiality Assurance

All data collected will be used solely for academic purposes. No individual employee or departmental information will be disclosed. Findings will be reported in aggregated form. ALS Ltd will be offered a summary of the final report upon request.

Expected Benefits to ALS Ltd

The study findings may assist ALS Ltd in:

- Identifying key stress factors affecting staff
- Understanding how workplace conditions influence psychological well-being
- Enhancing employee support systems and mental health interventions
- Strengthening organizational wellness and fatigue-risk management strategies

Request for Approval

I kindly request your written authorization to access the organization for purposes of data collection. Once approval is granted, I will coordinate the data collection schedule with your Human Resources department to ensure minimal disruption.

Researcher's Contact Details

Name: Sonia Atak Omondi

Masters of Arts in Counselling Psychology

Africa Nazarene University

Email: 24s01dmcp001@anu.ac.ke

Thank you for reviewing this request. I look forward to your positive response and appreciate your support in furthering academic and industry-specific knowledge on aviation mental health.

Yours faithfully,

Sonia Atak Omondi

Postgraduate Researcher

Appendix 3: Research Questionnaire

Questionnaire for Research on the Effect of work-related stress on mental health among aviation professionals in Kenya: A case of Aircraft Leasing Services (ALS) Ltd.

Introduction:

Thank you for participating in this study. This questionnaire is designed to gather information about the effects of work-related stressors on mental health among employees in the aviation industry, specifically at ALS LTD. Your responses will remain confidential and will be used for academic purposes only. Please answer the questions honestly based on your experiences.

SECTION A: DEMOGRAPHIC INFORMATION

1. Gender

   ☐ Male

   ☐ Female

   ☐ Prefer not to say

2. Age group

   ☐ Less than 25 years

   ☐ 25–34

   ☐ 35–44

   ☐ 45–54

   ☐ 55 and above

3. Job role at ALS Ltd

   ☐ Pilot

   ☐ Flight Attendant / Cabin Crew

   ☐ Engineer / Maintenance Staff

   ☐ Flight Operations Officer / Dispatcher

   ☐ Administrative Staff

   ☐ Management / Supervisory Staff

   ☐ Other (please specify): _____

4. Length of employment at ALS Ltd

   ☐ Less than 1 year

   ☐ 1–3 years

   ☐ 4–6 years

   ☐ More than 6 years

5. Employment type

   ☐ Full-time

   ☐ Part-time

   ☐ Contract

6. Typical work schedule

   ☐ Regular daytime

   ☐ Night shifts

☐ Rotating / irregular shifts

☐ Duty-based roster

SECTION B: WORKLOAD

Instructions: Please indicate how frequently each of the following statements reflects your experience in your current job at ALS Ltd. Tick (✓) one response for each statement using the scale below.

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always

	1	2	3	4	5
7. I have unachievable deadlines in my aviation-related duties.					
8. I have to work very intensively during my shifts.					
9. I have to neglect some tasks because I have too much work to do.					
10. I am unable to take sufficient breaks during my working day.					
11. I am pressured to work long hours.					
12. I have to work very fast to meet operational demands.					
13. I experience unrealistic time pressures at work.					

SECTION C: WORK–LIFE BALANCE

Instructions: Please indicate the extent to which you agree or disagree with each of the following statements based on your experiences in your current job at ALS Ltd. Tick (✓) one response for each statement using the scale below.

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

	1	2	3	4	5
14. I am able to balance my work responsibilities with my personal and family life.					
15. Work-related demands interfere with my responsibilities at home.					
16. I have enough time to rest and recover between shifts or duty periods.					
17. I often feel that work takes up so much of my time that I cannot do things I enjoy.					
18. My family or close relationships have been negatively affected by my work schedule.					

SECTION D: WORK ENVIRONMENT (PSYCHOSOCIAL & ORGANIZATIONAL)

Instructions: Please indicate the extent to which you agree or disagree with each of the following statements based on your experiences in your current job at ALS Ltd. Tick (✓) one response for each statement using the scale below.

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

	1	2	3	4	5
19. My colleagues are willing to help me when work becomes difficult.					
20. I can rely on my line manager/supervisor to help me with work-related problems.					
21. I receive supportive feedback on the work I do.					
22. I receive the respect at work that I deserve from my colleagues.					
23. Relationships between colleagues in my work area are strained.					
24. I am subjected to unkind words or behavior (harassment) at work.					
25. I am aware of others being subjected to bullying at work.					
26. If I reported bullying or harassment, I would be confident that it would be addressed.					
27. I feel supported when my work is emotionally demanding.					

SECTION E: JOB DEMANDS & ROLE CHARACTERISTICS

Instructions: Please indicate the extent to which you agree or disagree with each of the following statements based on your experiences in your current job at ALS Ltd. Tick (✓) one response for each statement using the scale below

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

	1	2	3	4	5

28. I am clear about what is expected of me in my job.					
29. Different groups at work demand things from me that are hard to combine.					
30. I know how to go about getting my job done.					
31. I have some say over the way I work.					
32. I have sufficient opportunities to ask managers questions about changes at work.					
33. Staff are consulted about changes that affect their work.					
34. When changes are made at work, I am clear how they will work out in practice.					

SECTION F: MENTAL HEALTH (GHQ-12)

Instructions:
The following questions are about how you have been feeling recently. For each one, please tick the option that best describes your experience.

35. Been able to concentrate on what you're doing?
☐ Better than usual
☐ Same as usual
☐ Less than usual
☐ Much less than usual

36. Lost much sleep over worry?
☐ Not at all
☐ No more than usual
☐ Rather more than usual
☐ Much more than usual

37. Felt you were playing a useful part in things?
☐ More so than usual
☐ Same as usual
☐ Less useful than usual
☐ Much less useful

38. Felt capable of making decisions about things?
☐ More so than usual
☐ Same as usual
☐ Less so than usual
☐ Much less capable

39. Felt constantly under strain?
☐ Not at all
☐ No more than usual
☐ Rather more than usual
☐ Much more than usual

40. Felt you couldn't overcome your difficulties?
☐ Not at all
☐ No more than usual
☐ Rather more than usual
☐ Much more than usual

41. Been able to enjoy your normal day-to-day activities?
☐ More so than usual
☐ Same as usual
☐ Less so than usual
☐ Much less than usual

42. Been able to face up to your problems?
☐ More so than usual
☐ Same as usual
☐ Less so than usual
☐ Much less able

43. Been feeling unhappy and depressed?
☐ Not at all
☐ No more than usual
☐ Rather more than usual
☐ Much more than usual

44. Been losing confidence in yourself?
☐ Not at all
☐ No more than usual
☐ Rather more than usual
☐ Much more than usual

45. Been thinking of yourself as a worthless person?
☐ Not at all
☐ No more than usual

☐ Rather more than usual
☐ Much more than usual

46. Been feeling reasonably happy, all things considered?
☐ More so than usual
☐ About the same as usual
☐ Less so than usual
☐ Much less than usual

SECTION G: OPEN-ENDED FEEDBACK

47. In your view, what are the main sources of work-related stress in your role at ALS Ltd?

---

48. What changes or initiatives would you recommend to improve mental health support at ALS Ltd?

---

49. Is there anything else you would like to share about work-related stress or mental health at ALS Ltd?

THANK YOU

Thank you for completing this questionnaire. Your input is highly valued and will contribute to improving understanding of work-related stress and mental health among aviation professionals.

Appendix 4: Research Permit

AFRICA NAZARENE
UNIVERSITY

P.O.Box: 53067 – 00200
Nairobi, Kenya.
Tel: 020 252 7170/1 – 5
Email: vc@anu.ac.ke
www.anu.ac.ke

27th March, 2026

Dr. David Ngigi
Ag. Director General /CEO
National Commission for Science & Technology
And Innovation (NACOSTI)
Off Waiyaki Way, Upper Kabete
P. O. Box 30623 -00100
Nairobi, KENYA

Dear Sir,

RE: RESEARCH PERMIT: Sonia Atak Omondi (Student ID#24s01dmcp001)

This is to confirm that Sonia Atak Omondi (Student ID# 24s01dmcp001) is a bona fide Master of Arts student at Africa Nazarene University (ANU), School of Humanities and Social Sciences (SHSS). She is pursuing Master of Arts in Counselling Psychology, a program that entails both coursework and thesis.

Sonia successfully completed her coursework and defended her thesis proposal entitled:

"Effect of work-related stress on mental health among aviation professionals: A case of aircraft leasing services limited, Nairobi, Kenya."

We kindly request that she be granted the necessary research permit to facilitate data collection and the successful completion of her thesis. Any assistance provided to her in this regard will be highly appreciated.

Faithfully,

Prof. Simon Obwatho
Deputy Vice Chancellor – Academic & Student Affairs

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **750029**

Date of Issue: **08/April/2026**

RESEARCH LICENSE



This is to Certify that Miss.. SONIA ATAK OMONDI of Africa Nazarene University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: EFFECT OF WORK-RELATED STRESS ON MENTAL HEALTH AMONG AVIATION PROFESSIONALS: A CASE OF AIRCRAFT LEASING SERVICES LIMITED, NAIROBI, KENYA for the period ending : 08/April/2027.

License No: **NACOSTI/P/26/4187846**

750029

Applicant Identification Number

Ag. Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

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See overleaf for conditions

Appendix 5: Study Area Map

